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PRIZE WINNING MERINOS.

Mr. E. D. King's Exhibit at the World's Fair.

THIS ILLUSTRATION represents a group of Merino sheep from Meadow Brook Farm, the property of E. D. King, Colfax Co., Kan., which were at the front at the World's Columbian Exposition Sheep Show. The ewe E. D. King, 216, won first prize at the Indiana State Fair, 1893, and headed the flock of rams and six ewes, at the Columbian he won second prize.

Fifth and sixth on aged ewes.
Second and third on two-year-old ewes.
Fourth on yearling ewes.
First and second on ewe lambs.
Second on ram and three ewes.
Second on pen of five ewes bred by exhibitor.

Second and third on pen of two rams and three ewes bred by exhibitor.
Visitors at the World's Fair, who examined the Merino sheep, were impressed with the wonderful character of the Meadow Brook Farm sheep exhibit. They were typical Western Merino sheep in size, vigor, and symmetry. The proprietor of Meadow Brook Stock Farm has studied to fashion his Merino sheep after the best models of profitable meat-producing animals; Nor, can it be suspected that he has omitted the fleece

A KEROSENE ATTACHMENT.

A New Improvement on Knapsack Sprayers.

In Bulletin No. 30, of the Mississippi Experiment Station, Entomologist Howard Everts Weed describes a kerosene attachment to a knapsack sprayer, which embodies a new idea of much value to the fruit grower and gardener.

The kerosene is placed in a separate tank, which is attached to the back of the main tank by means of two clips at the side near the top and holds one and one-fourth gallons. A one-fourth inch hose, attached by a collar, connects the kerosene tank with a brass pipe connect-

ing proportions of kerosene and water desired can be pumped from the nozzle by simply turning the stopcocks. Both stopcocks can be reached with the hand when pumping, although for ordinary purposes it is only necessary to turn the cock of the kerosene pipe, this being the more easily reached.

Experiments with this attachment show that the kerosene and water are so thoroughly mixed in the act of pumping that the kerosene is as harmless to foliage as is an emulsion of the same strength, and upon all plants so far as we have experimented we have been enabled to kill the insects without injury to the foliage. We have been especially successful in using the attachment upon the green cabbage worm (*Pieris rapae*) and the cabbage aphid (*A. brassicae*), the proportion of kerosene used being about one-tenth. For the cattle tick (*Boophilus bovis*) we have used the attachment successfully by using equal amounts of kerosene and water.

This attachment can also be used for many purposes other than the mechanical mixture of kerosene and water. In many cases it may be best to dilute fungicides only when applied to the foliage in the act of pumping, and for this purpose it will prove useful. A recent report recommends this method as being the most efficient in the preparation and use of the ammoniacal solution of copper carbonate. Of course when the copper or other corrosive compounds are used in this manner, the small tank should be made of brass instead of tin.

SUMMARY.

1. By means of an attachment to the knapsack pumps we are now enabled to mechanically mix kerosene with water for use as an insecticide.
2. This mechanical mixture appears to do all the work of a kerosene emulsion, thus greatly simplifying the method of applying kerosene as an insecticide.
3. This attachment is applicable to all the knapsack pumps of the Galloway pattern, and can now be obtained in connection with the "Perfected Galloway" and the "Perfection" knapsacks.
4. As this attachment is not patented.



South Florida.

EDITOR AMERICAN FARMER: I have read with much interest the many letters published in THE AMERICAN FARMER from "All Over the Country." But not having seen any from this section of South Florida, I will briefly mention a few of the many advantages and inducements this locality offers to the home and health-seeker.



Having resided and practiced medicine in this vicinity for the past 12 years, I can assure those in quest of homes or health that here they can find a locality absolutely free from malaria or typhoid diseases, where good land, near railroads,

The Advantages and Resources of Mississippi.

EDITOR AMERICAN FARMER: Having been requested by many of the readers of THE AMERICAN FARMER to give a description, etc., of Mississippi through that valuable paper, we condense our answer in the same and trust it will be satisfactory to all.

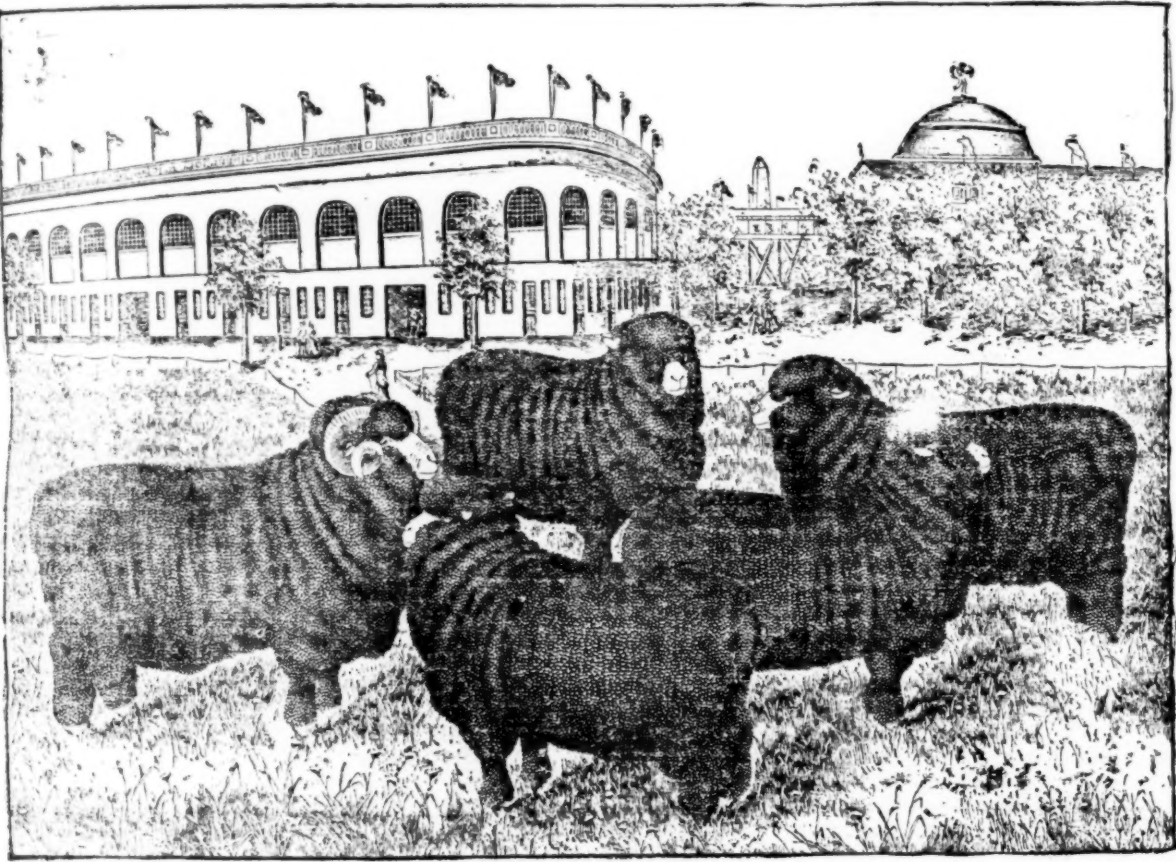
We cannot boast, as our Texas friend did, of a perpetual Summer, with fruits and vegetables every week in the year, except along the Gulf Coast. In the northern part of the State we have some very cold weather during Winter, but not of long duration. Cotton raising is one of the chief occupations, although we can raise, and do, almost any and everything that can be raised in a semi-tropical country. Throughout the central portion of the State the surface is principally uplands, which is especially adapted to stock raising. Horses, cattle, hogs, sheep, goats, in fact all kinds of



animals can be successfully raised here, with but very little expense, as we have a natural pasture here lasting from seven to nine months. And owing to the moderately mild Winters, as compared with other parts of the United States, it is but very little trouble and expense to have Winter pastures that all kind of stock do well on with but very little extra feed. Along the Mississippi delta is the most fertile lands in the South, and parts of it covered with the finest of timber, such as oak, beech, gum, cypress, ash, poplar, etc. Some of the largest and finest equipped lumbering and shingle mills in the South are situated on the river and L. N. O. & T. Railroad. There is more cotton produced in the Mississippi delta than in any other district of its size in the World. The prairies of the eastern part are very fertile, producing immense quantities of corn, cotton, oats, etc. The health is very good as a general thing, except in the delta, where malarial fevers and chills are prevalent during the latter part of Summer and Fall. The educational advantages are good. The State University, at Oxford, the Agricultural and Mechanical College near Starkville, the I. I. & F. College, at Columbus, cannot be excelled. There are also many private academies throughout the State, that offer as good educational advantages as could be wished for.

Labor is very plentiful, ranging from \$5 to \$12 per month, on the farm. The average price of horses and mules is about \$75; cows, \$15 to \$25; hogs, \$5 to \$10, and other animals in proportion. Corn sells readily at from 50 to 75 cents per bushel, owing to the time of year; oats, 50 cents per bushel; peas, 75 cents to \$1.50 per bushel; molasses, 25 to 50 cents per gallon. There are canning factories in all parts of the State that have increased the demand for vegetables. Tomatoes sell for 25 cents per bushel; potatoes for 50 cents; beans, green, 50 cents; garden peas, 50 cents. Fruits, melons, etc., are always in demand at good prices. There are many things that can be successfully raised here that do not receive much attention, such as tobacco, rice, wheat, sugar cane, etc. And there is no country that offers any better inducements to apirists than this, the honey produced in the apiries of this State being equal to the best, both in quantity and quality. We wish to say that what we have written is not for the purpose of inducing emigration or anything of the kind. It is only an answer to the many letters received by us from all parts of the country. We have no ax to grind.—JOHN W. DELX, Denmark, Miss.

Single stem training for tomatoes is thought to make the crop earlier but reduce the quantity. Plants from cuttings have been found to be earlier, and more productive early in the season, than the parent stock.



COLUMBIAN PRIZE WINNERS.

two-year-old in class "Merino A, form of carcass, with quality and weight of fleece to be considered." He is a large and handsome ram, with a long and dense fleece, very even all over, and covering him extra well on legs and belly, and Mr. King believes that the quality of fleece was not surpassed by any Merino on the Columbian grounds. He was sired by the 203-pound ram "Logan." Ewe 618, winner of first as yearling and sweepstakes female of class Merino A, is of medium size, and is of the highest Merino type in covering, quality, and density of fleece. Ewe E. D. K., 82, second among the two-year-olds and second in sweepstakes in class "Merino A, size and form of carcass, with quality and weight of fleece to be considered," is a long-bodied, broad, straight-backed, and ribbed, heavy-quartered ewe of Merino type, with an extremely even and handsome fleece. Her second fleece weighed 23 pounds, with a three and three-fourth inches staple, and she now weighs 133 pounds. The ewe E. D. K., 72 (seriously marked by the artist as 72 on the plate), won first as ewe lamb in the Merino A class. She is a large, blocky model in form, and complete in covering, with a long, dense fleece of high quality. She was sired by "Brick," also the sire of the first and fifth prize yearling rams in Merino A. Ewe E. D. K., 373, first prize ewe lamb in Merino A class, is of the smooth, broad-backed, Merino type, thoroughly woolled with a dense fleece of high quality. She is sired by Logan, and her grand dam is the dam of five Columbian prize winners, as well as grand dam of both the first prize ewe lambs Nos. 372 and 373, a record probably not equalled by any ewe of any breed shown at the World's Columbian Exposition.

PREMIUMS WON AT CHICAGO.

Mr. King won high honors at the Columbian, as the following list shows: In class form of carcass, with quality and weight of fleece to be considered, "Merino A." I won—
Second on two-year-old ram, and two of the judges favored giving me first.
Fourth on yearling ram.
Second on ram lamb.
Second on three-year-old ewe, and sixth.
Second on two-year-old ewe, and sixth.
Third on yearling.
First on ewe lambs.
Second on ram and three ewes.
Fourth on pen of five ewes.
In class B, size and form of carcass, with quality and weight of fleece considered, I won the following:
Third on yearling ram.

possibilities, when the ram "King's Chance" weighed 190½ pounds, and sheared 44½ pounds; when "Logan" weighed 200 pounds, and sheared 36½ pounds; when ewes sheared 24½ and 26 pounds. It is a rule with Mr. King to buy all the sheep he can't beat in the show ring.

E. D. King is a young man, but has become a formidable rival in the show rings even in the West, where the best mutton Merino sheep of recognized Vermont blood are met with.

It may not be acceptable to Merino breeders to call such sheep as King's "Western Merinos"; but the evidences yearly become more plain that the types of American Merino sheep are dividing up into families, though of the same blood and registered in the same record associations. So true is this that experts are prone to speak of Vermont Merinos as a distinct sheep from the Merinos of western Pennsylvania, and now we hear of Western and of King's Merino sheep.

The writer predicts divisions among American Merinos similar to divisions among the British Downs. In the latter case it was a work of years and bitter contention before consent was given to recognize distinct merits; so will it be with the great American Merino sheep; but it is to be seen as a coming fact—an inevitable fact.

Better Than Spraying.

EDITOR AMERICAN FARMER: A few flambos, such as are used in processions, filled with kerosene and lighted at night during Summer, will destroy more moths and other pests to the gardener and horticulturist than all the spraying that can be done. Hang them on stakes four feet from the ground and light them after dark. The cabbage moth is the only pest that does not work at night, and therefore cannot be destroyed by the lamp. To destroy the worms on the cabbage, dissolve half a pound of niter in two gallons of water. Sprinkle the plants well with the mixture, with a wisp of hay. The eggs are deposited by a pale-yellow moth with black spots on the wings; they are very small and are laid on the underside of the leaves. In 24 hours after the moth deposits them they hatch and become small worms, and at once commence cutting through the leaf; as soon as they come in contact with the niter it dissolves them. The sprinkling must be continued after a rain, as the niter or salt peter will be washed off. The application will fertilize the plants and in no way injure them. I have tried everything, but find this the best.—F. F. ATKINSON, Sedan, Kan.

ing with the cylinder of the pump. A stopcock is provided, so that the kerosene, or a portion of it, can be shut off at any time. A pipe for the passage of the water is provided, at right angles to the pipe through which the kerosene passes, and this is also provided with a stopcock with an elongated handle extending through the top of the main tank, so that the water may be shut off if desired. Owing to the action of kerosene upon rubber, the small rubber balls which serve as valves at the bottom of the pump cylinder, should be replaced with marbles. The hose connection between the kerosene tank and the pump should be of cloth insertion, so that it may last longer than would be the case if composed of rubber alone. It will occasionally be necessary to put on a new hose connection here, which is easily done. The kerosene tank can be made of tin, unless wanted for corrosive compounds, as explained later, and is readily detachable from the pump proper, so that when the pump is used for purposes other than where a mechanical mixture of two liquids is wanted, it will in no way interfere with the use of the pump in the ordinary manner.

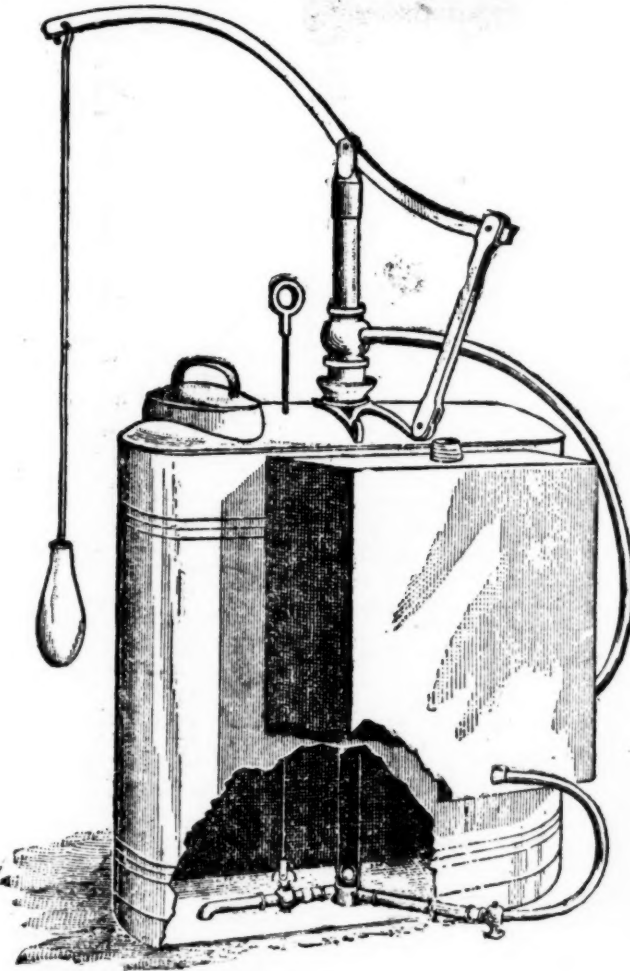
The mechanical mixture of kerosene with water is designed to do away with the necessity of making a kerosene emulsion. Kerosene is an excellent destroyer of insect life, and by its use many insects can be destroyed which could not be reached in any other way. Heretofore the kerosene has been made into an emulsion by first mixing with soapuds or sour milk and then diluting with water, as it cannot be used in an undiluted state on plants on account of its injurious effects. While it has been used as an insecticide very successfully in the form of an emulsion, yet various writers have reported far different results from their attempts in making a stable emulsion. It would seem that different conditions as to the kind of soap and water used, temperature, mode of operation, etc., so affect the making of the emulsion that the same results are not always obtained even by the same person when working under what might be considered the same conditions. Such being the case, if by the mechanical mixture of kerosene and water we can accomplish the same results obtained by an emulsion, we have greatly simplified the matter, so that it will be used as an insecticide much more extensively. Kerosene is wanted for use as an insecticide most extensively in garden work, and for such purposes the knapsack pumps are used almost exclusively. It is on this account that we have fitted the attachment to these pumps. By means of this attachment

all manufacturers are at liberty to place it upon their pumps.

5. The attachment can also be used for many purposes where a mechanical mixture of two liquids is wanted.

Barren Apple Trees.

Apple trees that grow in manured and cultivated soil run mostly to wood and yield no fruit. Too rich a soil is not desirable for an orchard, and the best orchards are found on a fairly good limestone gravel that is well drained. When the land has been made too rich, root pruning is advisable. This is done by digging a trench around the tree in the Winter or late Fall three feet deep, and cutting the roots at a distance of 12 feet or so from the tree. The trench may be filled with poor soil, which will check the growth of wood and tend to the production of fruit buds. Rather close pruning in the Spring, just as the buds are swelling, will have the same tendency. This checks the growth of leaf, and turns the sap into the remaining branches, and fruit buds are formed. A dressing of half a bushel of lime, air slacked, spread about each tree, will be useful to encourage fruit growth.



IMPROVED KNAPSACK SPRAYER.

to inform those in the North, who are thinking of making a home in the South, that this is a desirable section to make a home in; here is "room enough for all." We have schools and churches in every neighborhood, and we would be pleased to have a large immigration of intelligent and energetic people come in and help build up the country.—E. D. LOING, M. D., Brandon, Fla.

Montana.

EDITOR AMERICAN FARMER: Sometime ago I made a rash promise to give a description of our little County, and will now do the best I can.

The Bitter Root River is from 100 to 120 miles long, and is generally a nice, clear stream, full of speckled trout, white fish, graying and suckers. But at present it is about 600 yards wide, with a rapid current, and is doing much damage to crops on low lands. As there is a great deal of snow in the mountains and the weather quite warm, there is no show of it melting for some time.

Our valley is from 5 to 15 miles wide, surrounded on all sides by high mountains, some of which hold their heads very high—over 1200 feet—covered with eternal snow. Their sides are cut by deep, rocky canyons, out of which flows rapid streams of clear and pure water, cold as ice. Taken out in ditches and distributed over our rich lands, it gives us large crops of all kinds of grain, except corn, which does not do well, and all hardy kinds of fruits. Even apricots, peaches and pears are grown. Plums grow to perfection.

Wheat goes as high as 50 bushels per acre; oats from 35 to 65 bushels. We have between 6,000 and 7,000 inhabitants. About 4,537 horses; 9,320 head of cattle; 17,400 sheep; 2,364 hogs.

The above is taken from the tax list, and is none too large, as most ranchmen like to be safe.

We have good schools and plenty of scholars. In one district there are 53 on the roll. How is that for a County school?

As for health, why, my dear friends, we have to give our doctors County offices to keep the poor fellows out of the poorhouse or going with Coxey or the Salvation Army.

There is not much mining here, neither will there be until we get some home legislation. Then there will be plenty of prospecting, as there is every indication of mineral in our rugged mountains. This is the best timbered part of Montana, or of the Rockies. Lumber is cheap, from \$8 to \$20 for the best.

We have no coal or lime as far as yet known, which is quite a drawback; but as we have plenty of timber for fuel, we do not need very much coal. We only have one railroad, so that makes it bad for all except the road.

Our mountains have almost all kinds of game—moose, elk, deer, with plenty of bear and small game such as grouse, chickens and other game birds. There



are plenty of mountain sheep and white goats in the high mountains. Our Spring was rather cold and wet, but crops look well notwithstanding. And if those beauties in your village do not hit us too hard, I think we may weather it through until 96, when, I think, both old parties will hear something drop.

I take your paper and like it well; think you are doing lots of good for the farmer's interest.

Free silver is what we want out here. The tariff is not in it to us; yet, free traders are in the minority here. Honest legislation for the people, by the people, is all we ask or want.—J. W. GOODSON, Stevensville, Mont.



Yard Echoes.

Bowel troubles often result from colts being allowed to suckle when the mares are heated from work.

Mares in foal should be worked with great judgment. Steady, light work is an advantage to them, but heavy work should be done by other horses.

A little vaseline to which a few drops of carbolic acid has been added rubbed under the jaws of a horse will do much towards keeping away those big buzzing flies that keep him tossing his head continually.

Outside of liniments for sprains, the less medicine there is around a stable the better. At heart, intelligent doctors have very little faith in the curative value of any drugs. They rely on proper food and surroundings, and careful treatment.

It is better economy to use leaves, etc., for bedding, and the straw for food. It is a higher food value than second-class hay. The English farmers feed all their straw, and use it largely cut into chaff and mixed with pulped roots for fattening calves and sheep. This mixed feed is sprinkled with cottonseed meal, or cornmeal, and makes good meat cheaply.

Diarrhea in calves is almost wholly the result of overfeeding. Too much milk will surely produce this disorder, and in the warm weather the trouble may become serious if neglected. To give alum or other astringents is the very worst thing that can be done. It only aggravates the trouble. The right treatment is to get rid of the undigested curd by mild, laxative medicine, of which raw linseed or olive oil is the safest. Food is to be entirely withheld until the bowels have regained their healthy condition and digestion is restored. This may be in two days, when feeding may begin with not more than a pint at first of milk fresh from the cow. This may be given hourly, and if the diarrhea is checked, the quantity may be increased at longer intervals.

USE OF DRAFT HORSES.

Humane Treatment Secures the Best Practical Results.

EDITOR AMERICAN FARMER: "If a horse cannot lay to his work and bend his head down when he desires to do so, because he is not properly harnessed." Whenever a horse is employed for the purpose of drawing any vehicle, it is of the utmost importance that he should be able to employ all his strength to advantage. Everyone who considers all must acknowledge that if a horse has to do his work in a cramped or confined condition, or when he is inconveniently placed as regards the load, he cannot exert his full power, which is so much lost to his master, or if forced to perform a certain amount, that he is obliged to waste a great deal more of his strength (or muscular power) than is required, to his own great pain and injury. The question how to properly attach the horse to the vehicle is, therefore, one of the greatest importance to every master who wishes to get a proper degree of work in a fair and rational manner. Yet, from being unacquainted with the principles, few examine closely into the practice; an immense deal of horse strength is wasted every day on loads which, if properly attached, might have been comfortably moved with far less trouble, exertion, and pain. The act of pulling is performed by leaning forward with the weight of the body against the resistance of the opposing force, and then by strong movements of the limbs, keeping up and increasing the pressure; the weight of the body being of the utmost importance, as anyone may try by pulling at a rope passing over one shoulder and standing upright all the time. It will be found that what was before pulled with ease cannot be moved at all, or at any rate only by the most severe and continued efforts of the limbs. These muscular movements, exhausting the strength, try the system violently, whereas the body weight is easily employed without consuming the vital energies.

From the upright position of a man's body, he is not fitted to draw loads. If, therefore, this great difference is perceivable with his light frame, how great must be the waste of strength when the horse is prevented from throwing his whole weight fairly into the collar? Yet this is constantly the case through various causes.

First, and unfortunately, in too many cases, the collar is quite unfit for the animal. A horse collar is, we are sorry to say, frequently looked upon merely as a ring for the neck, to which the traces are to be affixed; whereas there is no part of the harness which is so important and which ought to fit so accurately. How often is a little collar, only fit for a pony, jammed on the neck of a much larger animal, so that every pull he makes gives the feeling of strangulation, and that will, in all probability, cause some fit, if long continued, besides liability to gall and wring the poor animal's shoulder? When this has taken place, the work cannot be fairly performed; and to do it all, the anguish of the poor horse must be indescribable.

Secondly, the horse is often prevented from throwing his weight into the collar by check-rein, a useless and painful in-

cumbrance introduced by vanity and retained by thoughtlessness amounting to cruelty. Ask horse keepers why they use it, and hardly one will give you the same answer, although it is generally supposed to be a safeguard in case of stumbling. The real object with which it was applied is that the weak, or old, or poor horse assumes the lofty carriage of the thoroughbred horse; and the tossing of the head, the foam of the mouth, and the restless agitation of the body (mute but expressive signs of pain and suffering) come, in a little while, not only to be disregarded, but even to be looked at with approbation. Fortunately this vitiated taste is rapidly going out of fashion as better information is diffused. Few of the London cab drivers use check-reins, knowing them to be inconsistent with proper work; and when one is observed it will invariably be found to be some poor animal whose wearied and haggard appearance is attempted to be disguised by this implement of torture.

Thirdly, a great cause of unnecessary pain and labor to many horses is a neglect in keeping the wheels properly greased. "Some persons may not be aware," says Hilover, in his work on Bipedes and Quadrupeds, "that the trifling neglect of a pair of wheels being comparatively dry or well greased, will cause 20 miles to take more out of a horse than 40 would in the latter; yet wheels absolutely screaming from dryness are often seen and heard attached to carts and wagons, and thus would the brute in human form let them scream till he had reached his journey's end or finished his day's work, though his horses were drawing from such cause at least one ton in four of resistance more than they would if the defect were attended to." Men who have loaded carts and driven horses all their lives, ought to know how a horse should be worked to his master's advantage and his own comfort; but the fact is the working men know little and care less on the subject. If this is not so, how is it that we frequently see the following error: A disproportion between the vehicle and the animal. May not a person everywhere observe a fault of this kind? A little horse staggering under the weight of a high and heavy cart, which, if the load be in rear of the axle, nearly lifts the unfortunate creature off his legs, placing him in a position in which it is impossible he can exert his powers at all favorably; and, on the other hand, how often is a tall horse seen between the shafts of a low gig or cart, pulling the shafts upward at a sharp angle? A position just as awkward and disadvantageous and wasteful of animal power as that mentioned before.—A FARMER, Columbiana County.

Tuberculosis.

At the recent meeting of the Massachusetts Veterinary Association it was stated that 44 per cent. of the cattle of Mexico are affected by tuberculosis. The improvement of the sanitary condition of the stockyard was a most effective way of combating the disease. Each animal should have 1,000 feet of air space in the stable. In some stables the space is as low as 194 feet. The exhalations of cellar manure, filling the stalls above, were perilous. Tuberculosis is not necessarily fatal in the human family, and neither, probably, is it so among cattle. The seat of the disease is in the human family, and so long as it exists among men it cannot be eradicated among cattle.

CLOVER LEAF WEEVIL.

It Makes Extensive Ravages in Ohio.

A comparatively new pest of the clover has recently been reported to the Ohio Agricultural Experiment Station from many localities in that State. It has been at work in the clover fields of New York for several years and has in that time been gradually pushing its way westward.

The pest is not easily reached by insecticides, where these are practicable, though it is very probable that powdered pyrethrum mixed with a low grade of flour, one pound of the powder to 10 of flour, and allowed to stand in a tight cask or other receptacle for 24 hours, and then dusted lightly over the fields, will kill all of the worms that it touches, and not injure the clover. Rolling the fields with a heavy roller will crush many, as will the dragging of a heavy rope over the ground by hitching a horse to each end and walking them abreast at a distance from each other, allowing the rope to bow or sag in the middle.

A fungoid disease has broken out among these worms in some localities, which is as contagious as cholera, and is sweeping them off in myriads. So efficient is this disease in keeping the pest in check that it is not likely that this clover pest will work its destruction for more than a year in the same locality, and even then is not likely to kill the plants.

American Southdown Breeders' Association.

The annual meeting of the American Southdown Breeders' Association, without transaction of business, adjourned from May 30, 1894, to July 4, 1894, at 2 o'clock p. m., in the Illinois National Bank, Springfield, Ill.

SHEEP AND WOOL.

Shearings.

The South American sheep raisers are going extensively into dipping. One English dealer has received an order from Buenos Ayres for 1,000 large drums of fluid dip, and 7,200 packages of the powder.

History is repeating itself. The easily-discouraged and changeable flockmasters have left the business, assigning the flocks to more judicious men who know that the time to enter a business is when it has reached its lowest ebb.

Among the many favorable arguments in favor of sheep, none exceed the small cost, possible economy, of the income. Even at the present low prices of wool and mutton, it is doubtful if a cheaper dollar can be obtained in any industry of the farm than from the sale of well-fed, first-class mutton and wool.

It is a fact that sheep raisers refuse to raise flocks unless the one product—wool—does afford the desired remuneration for capital invested, labor and care bestowed. They have hitherto been accustomed to look to the clips for all the profits, and now refuse to consider the mutton as primarily important in flock culture.

The man that is resting, waiting for the good old times and things to come around again, holding on to old methods and long-tried and now uncalculated (perhaps played out) breeds of stock, is the man that is going to get left. These hard times have developed an inquiry, awakened thought, compelled a forward movement that will be perpetuated right along.

The sheep of the piney woods of Georgia, Iowa, Alabama, and Mississippi have never been affected with scab, for the simple reason that they have not come in contact with it. When new flocks are introduced, new blood to improve flocks of so-called native sheep, it may be expected that scab and other animal parasites will be introduced, as they were into the original flocks of Texas and California.

Sheep are kept by rude nations, or on cheap conditions by intelligent people, for wool alone. When these favorable conditions no longer exist, when agriculture advances to higher planes, when land values increase, when the markets require mutton to supply the people with a more healthful, luxurious food, it has always met with a stubborn resistance, as it does now in this country, from wool growers. This statement will be objected to by many sheep raisers, but facts will fully sustain the assertion. Though wool and mutton should be and are of the highest importance to the sheep raiser, they are not the only valuable considerations. Sheep are the most economic weed, brush, and briar destroyers. They work free of cost to their owners, and living on these enemies of clean and better farming, give cash returns in fleeces and, at the last, carcasses of mutton. Nor is this, since the elements of fertility they leave for the soil are substantial benefits that no thoughtful agriculturist can object to placing to the credit of flocks.

The Broad-Tailed Sheep of Persia.

Some months ago THE AMERICAN FARMER gave an account of a lot of 15 of these curious and historic Oriental sheep, which were sent to the U. S. Department of Agriculture by Hon. Truxton Beale, U. S. Minister to Persia. The Government placed the entire shipment in the hands of Mr. C. P. Bailey, of San Jose, Cal., well known as the famous importer and breeder of Angora goats. Mr. Bailey was interested in these singular sheep, and determined to give them an opportunity to acclimate and show what they could do, if anything, for the sheep industry of the United States. That they might the more certainly do this, Mr. Bailey distributed them among his ranches in Monterey County, Cal., Lander County, Nev., and Harris County, Tex. The pair that were located at Paso Robles were especially fortunate, as it was thought, to be placed in care of the foreman, Mr. Cruickshank, who was well acquainted with this breed of sheep, having seen them in India.

Mr. Bailey writes, Oct. 31, 1893, expressing his satisfaction at the prospects, and saying:

"The more I see of these sheep, the better I am satisfied that they are really an acquisition to California mutton breeders. They are as 'tough as mules.' Not one of them has died since they left Persia, and seven out of the eight of the ewes have had lambs since they started, all of which are alive and thriving. One lamb, 60 days old, weighed 50 pounds live weight; one that was dropped here 10 days ago weighed 13 pounds at one day old. I believe that by crossing these bucks onto the common Merino sheep of California, we will get as big lambs at three months old as ordinary Merino lambs are at six months old.

"The 'Broad-tail' is the same breed of sheep that Gen. George Washington received from Asia a century ago, and that was used by the Custis family to help found the noted 'Arlington Long Wools' of Virginia. It is the sheep mentioned in the Bible, and is the sheep illustrated on the ancient monuments of Media, Persia, and Assyria. It is said that there is no better mutton sheep in the world. The tail is chiefly a mass of fat weighing from 10 to 40 pounds. Good sheep ready for the butcher ought to weigh from 90 to 100 pounds, besides the fatty appendage."

We are indebted to Mr. C. H. Shinn, Inspector of the Experiment Station, University of California, at Berkeley, for a valuable treatise in the report of the Experiment Station, etc.

THE GULF COAST.

A Sheepman's Paradise that can Defy the Wildest Bill.

From our special correspondent.
I am living in the best country in America to raise sheep. I am on the Gulf of Mexico, 85 miles east of New Orleans, La., and 65 miles west of Mobile, Ala.

The Counties of Jackson, Harrison, and Hancock, Miss., are famous for perennial pastures, abundance of pure, soft, velvety water, and a congenial, uniform climate.

So far as we know, sheep raising began here some 80 years ago. A few men conceived the idea of raising sheep and cattle. Of these there were four of the Ramseys, Col. Lewis's father, and a Mr. Harris, father of our present Henry C. Harris. These enterprising gentlemen began with small flocks and felt their way with great caution. The sheep ran at large, but they multiplied; and the families, I am told, also multiplied.

Some of these gentlemen had when the cruel war broke out as much as 10,000 sheep on hand; but the war was disastrous to their flocks and their numbers were greatly reduced.

It is, however, to the credit of the sons of those men who commenced the business here, and have fine flocks. The old men, who first inaugurated the systematic raising of sheep, have all passed away. Our system of raising sheep differs from anything found in other regions of the United States. Our sheep here all run in common flocks, are never fed Summer or Winter. All they get to eat is the natural growth of grass. Our Winter pasturage is perfect; there is never a shortage of feed or water, Summer or Winter. The greatest system is shown in collecting the flocks and assorting them to their several owners preparatory to the annual shearing. It may be stated here that this gathering of the sheep and the shearing is the only expense connected with wool growing in the "piney woods" of the South.

The 9th of April is the day set apart to corral and divide the common flocks to each flock owner. This division is done by ear marks, which are a matter of record and known to each other. The castrating, docking, and marking are all attended to when the flocks are collected and in the presence of all the proprietors.

Will you allow me to give some instances of successful sheep raising in this country? Col. John Hollingsworth, of this place, bought a ranch and 500 sheep on the ranch about seven years ago. In two years he sold wool and mutton enough to pay the first cost of the plant, and in three years the flock had increased to 1,000 head. Dr. Shannon, of this place, had near 1,000 sheep when he took a notion to go to the mountains of Tennessee for his health. He sold the flock to his herder, a young man by the name of Tom Reese, for \$2,500, all on time; not one dollar was paid down. In three years he had paid for the sheep from the sales of wool and mutton, and this year he sheared 1,000 sheep and marked 350 lambs. In the meantime he bought and improved a nice farm and is raising a family. He is out of debt; no mortgage on his farm.

I know an old maid to whom was given a ewe lamb 11 years ago. She had, when I last visited her farm, 133 sheep. She had sold 30 head for mutton, had killed and eaten three in her family. Her sheep had never been fed, ran at large in the "piney woods," and had not cost her \$1 in money.

Our country is perfectly healthy for sheep and for people. There is no foot rot, no scab, no diseases of any kind, unless it is from sheep brought here from the North.

Our sheep are a hardy race, being descended from sheep sent from Spain to old Mexico over 300 years ago.

I have been living here nine years. I came from Ohio, and think I know what I am saying. It is my opinion that, with judicious management and by crossing our native sheep with the Southdown or Shropshire rams, our lambs can all be sold at three months old at \$5 per head.

We have plenty of cheap land suited to tillage or pasture at from \$1 to \$5 per acre. I am ready to furnish full and reliable information to any of my Northern or Eastern friends. I will gladly answer all their letters.—WILLIAM SIBERSON, Ocean Springs, Miss.

Wool Growers Should Read This Statement.

The free traders who believe that wool can be grown as cheaply in this country as abroad, and who would have American wool growers conform to the same conditions as to the method of living, wages, etc., as the foreign grower, should read the following verbatim report, taken from the First Annual Report of the United States Commissioner of Labor. The report gives the condition, wages, etc., of shepherds in Italy, and will be found on page 417. It is as follows:

"Condition.—Lives in a haystack-like hovel; leads a solitary life; cannot read; possesses but a slight degree of intelligence.

"Diet.—Breakfast, black bread, oil, water; dinner, black bread, oil, water; supper, black bread, oil, water. This meager and monotonous diet is varied at infrequent intervals by a very small piece of bacon, salt pork, or macaroni, an onion or a little funocchio, on fete days by a little wine.

"Earnings, at seven cents a day, \$25.55.

"Cost of living for a year.—Bread, \$14.60; oil, \$5.47; other food supplies, \$1.82; clothing, \$3.66.

"Expenditures, \$25.55.

"Earnings, \$25.55.—Stockman and Farmer.

A Look at the Situation of Sheep Raisers.

While it may not be considered complimentary to sheep farmers, there is much truth in the following observations of one who has been among the farmers with his eyes wide open, taking in what he saw. He says: "I have spent several days among the farmers of this section of the country looking over their farms and flocks, listening to the tales of discontent, and sympathizing with the shepherds in this the darkest hour in the history of American wool growing. It is just and fair to say the flocks are in fair average condition, considering the drought of last Summer, with its shortness of grass and good water. The very low prices of clips and the lessened value of sheep has not, as a rule, caused these farmers to neglect their sheep, as might be suspected in view of the prospects that stare the shepherds in the face at this time. For some reason almost without precedent the flocks have been well treated. There are evidences of neglect of flocks on some farms, but as a rule the farmers show a good deal of faith in sheep, in spite of all discouragements. There is a feeling, a hope, that things may not turn out as bad as they seem; that some sort of a way of escape shall turn up that is not apparent now.

"It is well to say, too, that this is a wool-growing region, as good a one as there is in Ohio; that the flocks are almost invariably of Merino blood, and have always been. For some unaccountable reason the breeding of these flocks has been neglected. The yearlings are looking badly; the wool appears badly; the character of these young sheep has lost style and much of the Merino type. They, like their owners, look like they could not stand the strain of free wool. I could not but feel that a misapprehension of the situation had permitted their owners to make a mistake in not catering somewhat to the demands of the markets for mutton. These little, dried-up yearlings looked sorry enough when compared with the flocks that had been bred in direction of mutton. There were evidences that a Delaine Merino had been used in many flocks in one neighborhood. The yearlings were easily a large again, with better form, as well as size, and the fleeces were wonderfully promising. The length of the staple, the evenness of fleece, the completeness of covering, and, so far as I could judge, the density of fleece, had not lost anything, but, on the contrary, there was a great gain in cash values.

"I noticed, too, that these farmers were less doubtful of the future. In this they compared with a few who had either gone entirely to Shropshire sheep or made a cross in that direction. After discovering the fact that the flock owners who had mutton qualities in their flocks were in better spirits than those who had staid by their little, wrinkly, gummy Merinos, with their dried-up, starved fleeces, I came to the conclusion that there was too much bigotry and prejudice existing among sheep farmers. There must be a cutting loose from the old ideas and an adoption of new ideas, or there must come a time when hundreds of these good shepherds will quit the business, drop out, and leave their mantle to fall on younger men, who must have more independent ideas of the kind of a sheep that can be made profitable on these farms.

"I venture to ask, too, why so little is said or done to inform farmers of the merits of these mutton breeds, both Merino and English. To me these breeders seem to think the people must come to them for breeding stock, and that they have nothing to do but to wait for that desirable time to come. Why do not these breeders, if they have faith in their sheep, come to the front in such papers as THE AMERICAN FARMER, tell what they have, where they are, and give price lists, so the readers may know all about these things. There is a good deal of curiosity and not a little doubt as to what these mutton breeders believe themselves on this subject of breeds.

"When one attends the fairs and looks upon the sheep show, the uncertainty of what one sees is not very assuring or encouraging. These sheep that we find in show pens are so artificial, so fixed, that a common farmer concludes that he don't know what he really does see.

"Farmers need to be educated up; they want to be educated up to these things, so they can intelligently improve their flocks.

"There is a grand work here, and the sheep breeders must furnish up agricultural newspaper men with object lessons—cuts of their sheep, with full information of the pure breeds, and especially their crosses.

"What I have said here I say from what I know of sheep farmers here in northern Ohio. I venture to say the same wants exist in every section of the country now. A change has come, and the farmers are looking around to find an escape, if one exists."—WESTERN RESERVE.

Animal Parasites of Sheep.

Parasites of the nose—Grub in the head.

Parasites of the skin—The sheep tick. The sheep louse. The goat louse.

Scab insects—Head scab. Common scab. Foot scab.

Parasites of diverse organs—The penicillaria. Immature tapeworms. Bladder worms. Gid or staggers. Hydatids. The mutton measles.

Parasites of the alimentary canal and appendages—Adult tapeworms. The fringed tapeworm. The blood tapeworm. Liver flukes; the large liver fluke; the small liver fluke.

The stomach worms—Amphidoma centium. Strongylus contortus.

Intestinal round worms—Strongylus

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4. Bridge of Sighs, Venice.
5. Interior of Pompeii Museum.
6. The Sea of Ice, Switzerland.
7. Statue of Peter the Great, St. Petersburg.
8. Natives of Australia Fishing.
9. Native Street in Ceylon.
10. Arlington Cemetery, Arlington, Va.
11. In the Thousand Islands, Canada.
12. Nelson of Trafalgar, London.
13. Cathedral of Lima.
14. The Tomb of Canova.
15. Niagara Falls in Winter.
16. Jupiter Terrace, Yellowstone Park.

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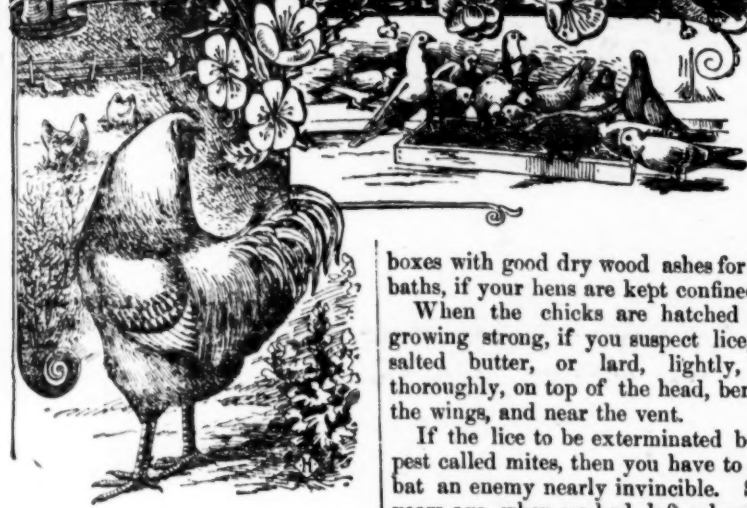
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POULTRY PIGEONS & PET-STOCK



POULTRY PESTS.

"How to Prevent and Exterminate Lice."

First Prize Paper.

BY INEZ REDDING.

That "an ounce of prevention is worth a pound of cure" is nowhere more fully illustrated than in dealing with that pest of all poultrymen, but more especially the amateur, lice.

Looking toward prevention, steps should be taken as early as possible; that is, when the hen is first put on the nest to sit. The nest and hen should be liberally sprinkled with Dalmatian insect powder; sulphur may be used in the nest in place of the powder, and is much cheaper.

When the chicks hatch and are removed from the nest they should (and the mother hen also) be treated to a dusting of Dalmatian powder, blown from a little bellows. Dust thoroughly about the head, under the wings, and about the vent. Should it be noticed at any time that the chicks spread out their wings "with an umbrella-like movement," as I recently heard it expressed, it is a pretty sure sign that lice are present, and they should again be dusted with the powder.

Many recommend greasing to prevent or rather to drive lice from chicks, but with inexperienced persons too much is often applied, and the loss of the chick is the result. Nothing has ever been found, cost, etc., considered, to equal Dalmatian powder for dusting hens and chicks. Purchase in bulk to lessen expense.

In bringing new hens or coops into a flock always dust them before allowing them to mingle with the others, no matter how well they may appear.

In each pen keep a dust bath of coal ashes if possible. If these are not to be obtained, use ordinary road dust, and into each box throw a handful of sulphur each time it is filled.

Once a week saturate the roosts with kerosene oil. Do this in the morning, so that all traces of the raw oil will have disappeared before nesting time. Crude petroleum is often used for this purpose, but the oil is generally conceded to be equally good, and is almost always conveniently at hand. Throw sulphur behind, all about, and on the roosts. It is not expensive, and should be freely used in every poultry house.

If all these precautions be taken in the beginning, lice will hardly find any inducements to enter.

Exterminating the pest when once it has gotten a foothold is another and more serious matter. Some say it is impossible to entirely rid a house which has been once infested by them, even if it remains unused for several years. While this may be true, the evil may be so lessened by heroic treatment as to cause but little concern.

The fowls should all be removed and rolled in brimstone be burned inside, after closing every crack and crevice as closely as possible. Do not admit any air for 24 hours (48 is better). Whitewash all the walls, kerosene oil all roosts (which must be new ones). Provide new nest, dust, and feed boxes. Burn all material taken from the infested coops on fire.

When the hens are once more domiciled in the house after having been thoroughly dusted with the Dalmatian powder, remove the droppings daily from the board under the roosts, and throw dry plaster over the boards.

Put sulphur in the new nests, and clean them out once each week. Clean up the straw, feathers, droppings, etc., from the floor once a week. Wash the windows and let in the sunlight; for lice, like all evil things, "prefer darkness to light."

Second Prize Paper.

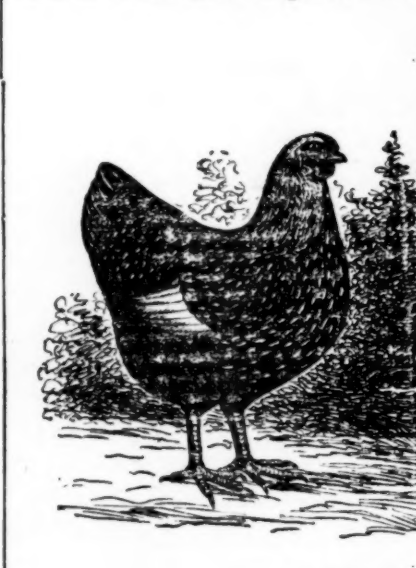
BY "GRANITE STATE."

If the lice be exterminated be the good old-fashioned body lice, go out to night, with just sufficient light to enable you to work, take your fowls, one by one, from the roost, and holding them gently but firmly by the feet, head downward, lift sulphur thoroughly through the loosened feathers. Scatter sulphur around the nests of your setting hens, and fill

boxes with good dry wood ashes for dust baths, if your hens are kept confined.

When the chicks are hatched and growing strong, if you suspect lice, rub salted butter, or lard, lightly, but thoroughly, on top of the head, beneath the wings, and near the vent.

If the lice to be exterminated be the pest called mites, then you have to combat an enemy nearly invincible. Some years ago, when we had left a lucrative employment for housekeeping on a farm, poultry keeping was taken up as a source of income. It was then we made the acquaintance of the mites. Previously they had been unknown to us. Whence they came we know not, but they were probably introduced by some of the different lots of fowls bought to make



up our first flock. Doubtless mites were seen for a year or two after their introduction; but amid the many cares little heed was given to them until the approach of hot weather, when the crisis came.

The poultry houses were literally swarming with vermin. The hens had free range, and came to the houses but little, save to roost, deposit their eggs, and get their food. A healthy hen, becoming broody, would go to the nest at night to come off next morning with comb nearly colorless, weak, and staggering, while her parted feathers had the appearance of being sprinkled with blood.

A heavy Plymouth Rock rooster was bled to death in a single night.

To even set foot in the hen house was to find more or less mites on the person, and each collecting of eggs must be followed by an entire change of clothing.

The mite, unlike the hen house proper, deposits its eggs and has its home on roosts, cloth, board, or in fact any inanimate thing, and comes forth to bleed the hens at night.

The old remedies were tried—ashes, whitewash, kerosene, sulphur, fumigation, and boiling hot water. Beyond question, many were destroyed, but their place was more than filled by the myriads daily hatched.

Our other half advised the slaughter of the entire flock of fowls. We demurred, and wrote to the leading agricultural paper of the State for a remedy. The editor wrote us: "If the state of affairs is as bad as represented, we can suggest nothing but to burn those buildings."

The case was desperate; so were we. The warfare began anew.

Carbolic acid crystals were dissolved in hot water in the proportion of two ounces crystals to one pint water. This liquid was poured on the clustering mites, and in an instant the problem was solved. The wriggling mass of vermin became dead matter, having the appearance of scorched leather. Wherever the mites could be seen they were given a liberal acid bath.

The poultry houses were cleared of droppings, old nests, and roosts. Whitewash was mixed with one ounce carbolic crystals to each pailful, and the poultry houses were thoroughly covered, and some weeks later the work was repeated.

This ended the mites. Since that time, some 15 years, the semi-annual whitewashing has never been omitted.

Other Methods.

To prevent lice use portable roost poles. Throw them out once a month and replace with new ones. Sprinkle the perches freely with coal tar.

To exterminate lice use a mixture of flowers of sulphur five pounds, and carbolic acid (liquid) one drachm. Rub the acid in the sulphur with a small paddle, and apply through the fluff and feathers of the hen with the hand. This will effectually remove all kinds of vermin, and is a safe remedy, as it will not interfere with the hatching of eggs or endanger the life of the chicks.—ELIZABETH MORTON.

My method of exterminating lice is as follows:

Empty the contents of the nests and scrape the floors thoroughly clean and burn all the rubbish. Spray every crack and crevice with a solution of one part

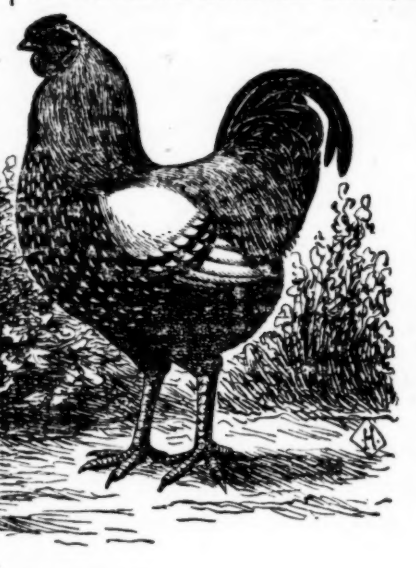
kerosene oil and five parts water; to every five gallons of liquid add one pound of soap. After the premises have been thoroughly sprayed, apply a heavy coat of whitewash.

If the hens are badly covered with lice, dip them in the solution used for spraying.

The spraying should be continued once a month for three or four months, until every louse and nit has disappeared.—W. J. R., West Galway, N. Y.

To exterminate lice, make a strong salt brine in the same proportion as you would for pork; or you may use old meat brine if more convenient. Wash all the roosts, boxes, nests, and sides of the walls every Spring and Fall. If you use this method you need have no fear of lice. The remedy is a simple and sure one for exterminating lice.—Mrs. MARY E. MANDER, Indiana.

The way I get rid of lice is to wrap rags, dampened with kerosene, on a stick, and set fire to it, holding the burning stick close to the cracks and corners, so



that the fumes may reach every hidden louse.

Take one-half bucket of whitewash and put one pint of kerosene and five cents' worth of carbolic acid into it, and apply once every two or three weeks to your henhouse, and I think you will not be bothered with lice.—L. E. WARD, Kansas.

What I Know About Wyandottes.

BY MRS. SARAH SHINN LINDSEY, PIKE COUNTY, Mo.

There are four standard varieties of Wyandottes—the Silver, Golden, White, and Black. There is no difference in their qualities, except color; but the Silver Wyandotte is the original, from which the others were taken. Hence it is an older breed and more vigorous than the others.

It is not as large a breed as the Light Brahma, but is larger than the Leghorn. Its rose comb is an advantage against the frost in Winter, and its skin and legs are a reddish yellow. As layers, I consider the hens equal to any of the breeds. The chicks are plump and attractive in appearance, and they mature early.

I have bred the Silver Wyandotte exclusively for eight years, and consider them good sitters, good mothers, and very docile to their brood. As layers, they have few equals, and often lay before they wear their brood. Their plumage is silver and black, with red rose comb, which makes them very attractive as farm fowls. There is nothing prettier in the fowl line than a group of Silver Wyandottes on the lawn, the dark green of the cedars overhead and a pair of peafowls in the background with wings and tail spread.

For an all-round general-purpose fowl they are second to none; for the table they have no superior—their flesh is sweet, juicy, and tender. My fowls have free range, and if they have a good, warm house in Winter no fowl will give a greater return in eggs for the food consumed. The little chicks when first hatched resemble a basket of pansy blossoms.

I first fed hard-boiled eggs, then I fed five times a day for the first two weeks cornbread made with sour milk, soda, and salt, with black pepper just enough to taste a little hot. I give them sweet milk for drink, and when the weather is cold I warm the milk. Cover the pan, so they will not get in the milk with their feet. Last year I had 500 chicks, and expect to increase the number this year.

I am troubled very little with diseases. When I remove a hen from her nest, with her young, I always cover the bottom of coop with dried clover blooms from the hay loft; this serves to keep their feet warm, and they have something to pick at. In a few days I change for fresh clover, which keeps the coop dry, warm, and healthy. For colds or roup, my remedy is carbolic acid; one or two drops on a piece of bread the size of a large bean, divide in three equal parts, and give one pill each morning. I also put a teaspoonful in each quart of drink-water, as a preventive, every day while there are any affected; they will not drink enough to hurt them.

A Wyandotte cock has a silver-white head, rose comb, yellow legs (clean of feathers), silver hackles, with a black stripe down each feather; silver-white back, saddle same as hackle; breast black, with white center, the center tapering to a point near the extremity; tail black, wings composed of feathers one-half black and the other half white, or black edged with white; when the wing is folded there should be a well-defined ring-bar across the wings.

THE GARDEN.

Pickings.

Keep the raspberries free from weeds. Pumpkins and squashes in the corn rows are clear profit.

Continue with seed sowing, if you would have contiguous crops. Mulch the celery bed heavily between the plants with a fine compost of cut straw.

Berries planted a year ago should be allowed to bear but little fruit, but of extra fine quality.

Long-continued cutting of asparagus weakens the vines, which should be given a rest until next season.

Cucumbers for putting down may be set as late as June 20. They will escape the striped beetle by being planted late.

Tomato plants when pruned and carefully tied back ripen their fruit in advance of those neglected, because the sun can get to them.

A few gooseberry plants should find a place in every fruit garden, as they give a valuable and to the list of really valuable fruits.

If currants or gooseberries have been injured by the borer, cut the affected canes out, and do it thoroughly, then burn them immediately.

Late cabbage can be put out the first of July. If set earlier it will make too much growth before it is time to put away for Winter.

Dwarf limas are a valuable acquisition to the garden crops. They are much surer under adverse conditions than the pole kinds, beside needing no poles.

The mouths of a plant are its fine white roots. They take up food just as a young animal, and if this is not supplied they die for the same reasons an animal would starve or die.

Tomatoes and eggplant in the green-houses or cold frames, should have been out two weeks ago. Carefully watch the eggplants and keep the bugs picked off of them until they are out of danger.

Improvement in the quality of beets and in the processes of manufacture is so great that in Germany the root will produce 10 per cent. of its weight in sugar. This is encouraging to those who are experimenting in this line in this country.

Asparagus may be grown with the use of fertilizers as well as by the application of manure. Experiments made during the past two years are very favorable to fertilizers, applications being made late in the Fall and early in the Spring. A hen with a brood of chicks is the best protection against the asparagus beetle.

Potash increases woody growth, while rich barnyard manure tends to increase the fruit growth. The wood growth cannot be allowed to suffer. Without new wood each year the prospects of crops of fruit would be small. Wood ashes supply the potash in the right shape, and they should be spaded and hoed into the soil thoroughly.

Do not, after cutting over the asparagus bed, leave the bed to become covered with weeds. These weeds, which often hide the plants from sight, take the nutriment from the soil and starve the roots, which need the whole supply of food in the soil to gather sustenance for the next year's product. The rows of plants should be kept quite clean, the female plants, which produce the red seed balls, cut down to prevent them from seeding and filling the beds with volunteers, which are the worst of weeds, and a liberal quantity of manure applied to enrich the soil and feed the roots, upon which next year's crop depends.

In a recent bulletin, the Pennsylvania Experiment Station says: "He who grows for the market will profit by a little attention to the kinds of raspberries he produces. In color he may have yellow, red, purple, and black, and in Pennsylvania he will find that none of them will require Winter protection. For yellow, the Caroline and Brinkley Orange are very profitable berries; for red, the Marlboro, Cuthbert and Rancocas; for purple, the Shaffer's Colossal, and for black, the Souhegan, Mammoth Cluster, and Ohio. These are all well-tested varieties which can be recommended for productiveness, covering a period from June 20 to Aug. 1 with profitable pickings."

Exterminating the Bugs.

EDITOR AMERICAN FARMER: I saw a letter from Mrs. E. Delay in your paper wanting to know how to get rid of what we here in Missouri always call the cabbage bug. We have in our house the old-fashioned fireplace (stone chimneys), and consequently always have plenty of ashes and soot in the fireplace and chimney, and we take of the ashes (unleached), and with long-handled broom sweep down the soot in the chimney and get, say, one-half bushel of each; mix them together, and with a meal sieve proceed to the garden or vegetables while the dew is on and sift the mixture over the young vegetables. It is a sure cure, besides a great fertilizer. Try it, Mrs. D., and let me see in our paper the result. THE AMERICAN FARMER is our best friend.—MRS. J. R. ADAMS, Goodland, Mo.

Black Currants.

It is not generally known that the small black dried currant is exclusively a product of Greece and her islands and is not cultivated elsewhere. They are known to commerce as the Zante currant, but are really a variety of grape. For the past few years the production has reached over 150,000 tons. Quantities of the best grade of the fruit are grown on the Ionian Islands, and immense vineyards of them grow along the shores of the Gulf of Corinth. The vines are

planted closely in rows and are kept pruned to bushes. The fruit when ripe is dried upon the ground, which accounts for the large amount of sand, gravel and other refuse found among them.

How Mrs. Farmer Can Earn Money from the Garden.

EDITOR AMERICAN FARMER: There are not many farmers' wives or daughters but would like to earn money for their very own selves.

They well know that "mam's" lambs and colts and calves grow into "dad's" sheep and horses and cattle! And they know, too, that the old notion of the egg-and-butter money belonging to the wife is as false as any fool-idea people ever conceived; for there's the "butcher and the baker and the candlestick maker" to pay, and nothing except the "hen fruit" to do it with. As for the butter, the average farmer hauls his milk to the factory or creamery, and the proceeds go into the capacious jaws of that article known as the family purse; and though Mrs. Farmer's hand may be the means of putting it in, Mr. Farmer's lordly paw does it out as he deems fittest! But all this is by the way, and only to show the futility of depending upon such means to earn money.

Now, if you want to earn a few dollars easy, just dig and grate (I grind it on my meat chopper) some of that horseradish, fix it with good vinegar, all ready for table use, and, my word for it, you can sell all you'll fix at 50 cents per quart to hotels and restaurants.

Probably you have some bunches of asparagus that has been set out for ornament. Just cut and tie into neat bunches all you can clasp with your hand. It sells here for from six to ten cents per bunch. If you haven't a bed, set one out; it is scarcely a bit of trouble, and amply repays one.

Send some bunches of that early plant to your grocer sometime when Mr. Farmer is going to town. He will likely sell it for nothing, or at most only a few cents' commission.

The main thing is to have these things tempting and early. Remember the traditional early bird.

Now, just carry those scrubby geraniums and things you've been fussing with down cellar and let them rest. Set some deep boxes in their places and plant some cucumber seed in them. Treat them about as you would out of doors. Be careful about having it too dry or hot, and when you set cucumbers the first of March for five cents apiece you'll feel amply rewarded for all the time and capital expended. They should be allowed to grow to one inch or one and one-half inches in diameter. Cucumbers sell here for 50 cents per hundred all Summer. Can you earn that sum any easier?

Start tomatoes early in boxes large enough for them to attain their growth, and see if you can't have ripe tomatoes for market early in May. They will sell two for five cents, and in June and July for from 10 to 20 cents per dozen. Have some large ones to set in the garden, without disturbing the roots, as soon as danger of frost is past.

Start tomato and cabbage plants for sale in strawberry boxes, a dozen to the box for five cents.

Start melons early in the house, and set out without disturbing. Have them ready for the June circuses, if possible.

If your heart yearns after the posies, try and have a goodly lot of white ones for Memorial Day (nothing sells as well as white). I know a woman who gets as high as 75 cents for a large bouquet, and down to five cents for a buttonhole one.

Save all kinds of vegetable seed, for sale. I know women who earn a nice lot selling pumpkin seed. They sell here in the Spring for 10 cents per quart, and it's fun to save them.—GENEVA MARCH, Janesville, Iowa.

Thinning Corn.

The Ohio Experiment Station has been trying the effect of thinning corn, with the following results:

Four-fifths of an acre of land from which the soil had been removed some years since for making brick, was divided into four equal plots. A strip of uniform width across the plots, as laid out, hence involving an equal amount of each plot, grew melilotus, or sweet clover, the four seasons of 1888 to 1891, inclusive. The melilotus was not cut, but was allowed to grow down each year and reseed the land. A crop of wheat was out from the land in 1892. Aside from any effect which the melilotus may have had, the land was practically uniform in quality and condition.

Two plots were planted at the rate of one grain per foot in the rows. The seed was excellent and almost absolutely every grain grew. These plots were not thinned. Two plots were planted at the rate of three grains per foot in the rows, and were thinned to practically the same number of stalks per acre as were then on plots one and three. The thinning was done July 7, just four weeks after planting, and the corn ranged from one to two feet high.

The plots which were thinned yielded 696 pounds of ear corn, while those which were not thinned yielded 812 pounds, a decrease of 14 per cent. due to the thinning process.

This was an exceptionally dry season. The thinning probably caused more injury than would ordinarily result.

Co-operative Forestry.

New Hampshire people are trying a new scheme in forestry. Local associations are formed, each of the members of which contributes small sums at intervals, which are devoted to the purchase and improvement of mountain tracts. It is expected that clubhouses and other places of resort will be erected on these for the accommodation of the members, who will receive beside the profits resulting from scientific cultivation of the timber.

THE APIARY.

Hummingbirds.

Honey prospects are in excellent shape and the bees working industriously at red clover.

A beekeeper of Fort Logan, Colo., wintered his bees in a house made of bales of straw, and found the method successful.

Bees inspectors are being appointed in some localities, and it should be so in every County where there is a suspicion of the existence of foul brood.

Whenever bees buzz around the blossoms of a tree, it is a sign that the blossoms have not been killed by frost. Bees visit only the live blossoms.

Even if there be a poor market for buckwheat honey, it answers as well for Winter food for the bees as the lighter grades. It pays to grow it for a Fall crop of nectar to supply the bees all the Fall and Winter, while the Spring and Summer honey can be sent to market.

To make a hiving box get four boards of thin, light wood, the thinner the better, 18 inches long and six wide. Make them into a box, with one end open. Bore plenty of auger holes in all the sides and end piece. Put this box on the end of a light pole some 12 or 15 feet long.

A New Mexico beekeeper controls his swarms in the following manner: When the swarm issues he puts on the queen trap, catches the queen, and while the bees are out on the wing, removes all combs with brood and eggs. Every bee is brushed off into the hive and the combs replaced with empty combs or frames and foundation. He lets the bees live themselves in the old stand, and the queen is admitted, to go among them when they are nearly all in.

Mr. James L. Neal, a leading farmer of Harrodsburg, Ky., had a severe experience while trying to have some bees. He had placed a ladder under a tree in which the bees had settled, and was endeavoring to cut the limb on which they had gathered. He did so, but just as he was in the act of descending the ladder gave way and he was thrown violently to the ground, carrying with him the branch and the bees. The insects attacked him, and before he had a chance to escape he was stung by many of them. His injuries were severe.

Darwin estimated that the amount of clover seed produced in a neighborhood is proportioned to the number of old maids. He explains it in this wise: "There can be no clover seed without the bumblebee, because no other insect fertilizes it. The enemy of the bumblebee is the common field mouse, that steals into their nest and destroys the larvae and eats up the honey. The enemy of the mouse is the common house cat, and the solid friend of the cat is the old maid. Consequently, the more old maids the more cats; the more cats the less mice; the less mice the more bumblebees, and the more bees the more clover seeds."

A bee writer says he does not put on the surplus boxes until white clover is ready to bloom. Locust and poplar bloom several days before white clover, but neither of these produce first-class honey. It is well to get the dark honey stored below and supply extra combs if necessary. When the poplar blooms freely it will give a good supply for Winter stores.

Comb made from dark honey is sure to be dark. White honey stored therein will look dark even though of the best quality.

One beekeeper says:

"The bees will carry honey alone more readily than with a honey board, and more readily with three-eighths-inch top bars than with seven-eighths-inch top bars to brood frames."

A Soldier's Letter.

EDITOR AMERICAN FARMER: We are having very warm weather. We had the warmest March that I ever saw in Iowa, until the last days, and then it turned cold and snowed, and the ground froze hard. The thermometer went down to eight degrees below zero. The elm trees were beginning to leaf at that time, and now they look like they are dead.

Several colonies of bees perished in this neighborhood about that time. Whether it was due to the cold or not we can't tell. Some said their colonies were strong before, and a few days afterwards they found the hives with plenty of honey in them, but no bees, not even dead ones, and the hives clean. I lost several colonies that way a year ago this Spring, and some in the Winter, and I came out with one colony a year ago and never got any swarms from it. I still have one, but it is very strong. Now, I want to work into bees and fruit, for I am not able to work but very little any more, by reason of disabilities incurred in a three years and seven months' service in the Union army. I received a letter a year ago from a lady in California stating she saw my communication in THE AMERICAN FARMER. I sent her some bee books and price list, and referred her to some bee men in that State, where she could get information.—H. T. LATHROP, Bidwell, Iowa.

A Bee Problem.

In a recent number of the A. B. J. is asked which will give most surplus honey, other things being equal, and which will give most extracted; a colony that swarms, or one that never

thinks of swarming, counting the crop of both mother colony and swarm? There were 26 replies, 10 for non-swarming, eight for swarming, and eight doubtful answers, nearly all of which might be for non-swarming. The main thought is that if the honey flow comes early in the Summer and the swarming in the midst of the flow it would lessen the crop.

INHABITED ONLY BY HOGS.

An Alabama No Man's Land Where Human Beings Have Never Lived.

In the northern part of Limestone County, Ala., says a writer in the *Pittsburg Dispatch*, is a tract of land consisting of more than 1,000 acres which is not on the map of the State, nor can it be found in the register's office of that County. No one claims it and no taxes have ever been paid on it. It is a vast wilderness, inhabited by snakes, deer, and razor-back hogs. It is a free hunting ground and thousands of these hogs are killed every year, more for the sport than for any thing else. The hogs are wild and cannot be domesticated. Their yield is said to be enormous. Tom Booth, of Pulaski, Tenn., secured a male and a female and did all in his power to tame them, but failed. He kept them a year, and at the end of that time they were as wild as at first. The more he fed them the thinner they became. Within the year they consumed 400 bushels of corn and were as lean as church mice. During that time the sow had five litters of pigs, numbering 210. Mr. Booth could not tame any of these nor get them fat enough to make even soap grease. Finally he gave them to a negro, who now considers himself under no obligations to Mr. Booth. The flesh of these hogs resembles horseflesh. It is as tough as conium, and a large-sized hog of this species rendered would not make grease enough to fry a skillet of batter cakes. They go through a garden like a shovel plow, and no vegetable escapes them. They can crowd through a crack that would hardly admit a mouse, and their sharp noses act as levers for garden gates. The Tennesseans make great fun of Alabama's razor-back hogs.

A preventive of colds is said to have been discovered in the new paper stockings now made in Germany. The material they are formed of is specially prepared paper, impregnated with some substance which apparently sucks up all perspiration as quickly as it is formed, keeping the feet warm and dry.

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TO OUR READERS.

Temporarily, THE AMERICAN FARMER will resume its old habit of appearing once a month. As it contains much more good practical reading matter than any other paper offered at the same price, we feel that it will continue to be as welcome as ever to its many readers, and we hope that the times will soon rapidly improve to such an extent that we will be justified in resuming our semi-monthly publication. We are looking forward to the time when we can do even better, and make THE AMERICAN FARMER a weekly visitor to 1,000,000 farmers' homes.

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Name of Periodical	Regular Price	With the American Farmer
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The Young Farmer	1.00	1.25
The Young Sportsman	50	75

OUR NEW CLUB OFFERS.

We have arranged to club with the *Weekly Witness* of New York. Its price is \$1 a year when taken alone. The *Witness* is a 16 page weekly paper and among its contributors Rev. Josiah Strong, D. D.; Rev. John Hall, D. D.; L. L. D.; Rev. Robert S. MacArthur, D. D.; Rev. Theo. L. Cuyler, D. D.; Rev. M. C. Lockwood, D. D.; of Cincinnati; current weekly sermon by Dr. Talmage; Sunday school lesson by Dr. George F. Pentecost, etc. It is one of the strongest and most popular family newspapers published.

The *Witness* and THE AMERICAN FARMER will be sent to any address for one year postpaid for the small sum of \$1.20 for both publications.

Sabbath Reading is a 16 page weekly paper, non-political, non-sectarian; no secular news. "Determined not to know anything about you save Jesus Christ." Good, not goody. Religious, not dull. Contains Sunday school lesson; Christian Endeavor Topic; Sermons; Stories; Live Reports of City Missions. Sixteen pages filled with the best Christian thought of the age. *Sabbath Reading* alone costs 50 cents a year, but we have made an arrangement with its publishers so that we can send both it and THE AMERICAN FARMER, postpaid, to any address for one year for only 75 cents.

At Home and Abroad, the leading musical monthly publication of New York City, will be sent one year, with THE AMERICAN FARMER, for \$1.10 (both papers postpaid). Every number of *At Home and Abroad* contains a collection of vocal and instrumental music that could not be bought separately in sheet form in the stores for less than 70 cents. Remember that by our arrangement 12 numbers of this publication and THE AMERICAN FARMER for a year for only \$1.10.

These offers are open to all subscribers in connection with THE AMERICAN FARMER. Neither the *Weekly Witness*, *Sabbath Reading*, nor *At Home and Abroad* can be furnished by us without a subscription to THE AMERICAN FARMER for one year accompanying the order.

CENSUS figures quoted by Edward Atkinson in the current *Forum*, show that the amount of real estate incumbrance in the 11 Counties in and immediately around New York City exceeds the total mortgage indebtedness on all the farms in the United States.

SIGHTS AND SCENES OF THE WORLD.

Part 12. Number 12.

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CUT THIS OUT.

WOOL ON THE FREE LIST.

The real friends of the farmers in the Senate made a prolonged and very able fight to secure some measure of protection for wool, but it was a fight against great odds from the very first, and ended in defeat. The importers, the manufacturers, the demagogues were too many for them. "Free wool" was made the cloak to hide manifold sins; the wool grower was led like a lamb to the slaughter to distract attention from the Sugar Trust and other scandalous bargains. The idea was that the farmers can be palavered and hoodwinked easier than anybody else, that they can be skinned alive without yelling, which nobody else will submit to.

As Senator Sherman said, this is the culminating atrocity of the Wilson Bill. While industries whose whole importance does not amount to as much as the wool growing of single Counties, were carefully coddled on account of the votes that they control, the 1,000,000 wool growers who live in every State and nearly every County were deliberately sacrificed and robbed.

The end came June 15. Senator Peffer, who had been from the first zealous and faithful in his efforts to secure some measure of protection, offered some modification to his proposed amendment for a duty on raw wool. Where the McKinley law levies a duty on first-class wool of 11 cents, he proposed a duty of five cents; the McKinley rate of 12 cents on second-class wool he proposed to change to six cents; wool of the third class, worth 13 cents or less, is to pay 15 per cent. duty ad valorem, and worth over 13 cents is to pay 25 per cent. in place of the McKinley rates of 35 per cent. and 50 per cent.

Senator Teller offered as a substitute the schedule of the McKinley Bill. This was defeated by a strict party vote—37 to 29—Allen, Kyle and Peffer voting with the Democrats against it.

Senator Power, of Montana, offered another substitute fixing the rates at seven and eight cents respectively on first and second-class wool and 25 per cent. and 35 per cent. ad valorem on third-class wool. It was rejected—37 to 29.

The vote then recurred on Senator Peffer's amendment which reduced the McKinley rates an average of 50 per cent. The three Populists changed front on this amendment and voted with the Republicans in favor of it, but the Democratic lines were unbroken and the amendment was lost—35 to 33. Senator Hill refrained from voting. Senator Irby was paired against the amendment.

Now we may expect demagogues going up and down the country vigorously lying about what has been done to reduce the cost of the workingmen's clothing, blankets and carpets by taking away the shred of protection given the wool-growers, while leaving the vastly greater protection given the manufacturers and clothing makers hardly touched. It is shameful, sickening hypocrisy added to downright robbery.

PASSAGE OF THE ANTI-OPTION BILL.

The Anti-Option Bill was passed by the House of Representatives June 22, substantially as reported from the Committee on Agriculture. The majority was unexpectedly large, the yeas being 150, nays 87, and present and not voting, 1. The yeas included 93 Democrats, 47 Republicans, and 10 Populists; the nays 61 Democrats and 26 Republicans.

The only considerable amendment to the bill was one proposed by Mr. Lacey, of Iowa, which excuses farmers and owners of grain at the time of sale from the penalties of the act if the delivery is delayed by failure of transportation through no fault of the owner and seller.

The bill now goes to the Senate, but will not be considered there this session.

THE President of the Sugar Trust unblushingly announced a similarity of political principles to those of the notorious Jim Fisk, who said that the Erie Management was "Republican in Republican Counties, and Democratic in Democratic Counties." Mr. Havemeyer indignantly denied that he ever contributed to both parties at the same time in the same State. In 1892 nearly all of his contributions had been to the Democratic campaign fund.

TARIFF Deforming has already cost the 1,000,000 sheep growers of the United States at least \$100,000,000, or an average of \$100 apiece. Experience keeps an excellent school, but her tuition is costly.

AN OVERWHELMING FACT.

The trust that is doing our farmers infinitely the most harm is one beyond our boundaries. It is the great English-Argentine wheat combine, which has undertaken the work of supplying our best customers with breadstuffs. There is an immense amount of capital in England seeking employment. There are in Argentina, lying comparatively near the seaboard, more than 1,000,000 square miles of as fine wheat land as there is in the world, or as much as there is in our whole Northwest and Canada. The scheme into which the Baring Bros. entered, was to take up enough of this to supply the English market with wheat, build communicating railroads, where necessary, and work it with the latest improved machinery and cheap Italian labor, which could be had in any desired quantity. Though the Baring Bros. got into it too deeply, and failed, the scheme is being worked right along, and with great success. It has been found that the best quality of wheat can be raised at a profit for 25 cents a bushel, and laid down in Liverpool for 50 cents. In fact, 82,000,000 bushels have been so laid down in England, this year, displacing that quantity of American grain. This tells the whole alarming story. The American farmer no longer controls the wheat market of the world. He will be very lucky if he succeeds in controlling that of this country, as Argentine wheat can be laid down in New York, Philadelphia, Boston, Baltimore, Charleston, Savannah, and New Orleans, if the tariff is taken off, cheaper than he can sell it and live. The only course that is left for us is to abandon the wheat markets of the world, and devote ourselves to raising the \$300,000,000 worth of farm products which we import every year. If we do this, we shall be in much better shape than by raising wheat, even at the prices we formerly obtained.

A NATIONAL GOOD ROADS MEETING.

The happy suggestion was made that the coming National Editorial Convention, which meets at Asbury Park in a few days, be made the occasion of holding a National Good Roads Conference. A large proportion of those who will be present at the Convention are deeply interested in the Good Roads Movement, and they are very influential factors in promoting its success.

The suggestion was received with enthusiasm everywhere, and the Secretary of Agriculture at once took the deepest interest in it, and has done all that he can to insure the success of the conference. The date has been fixed at July 5 and 6, and it is believed that there will be representatives present from nearly all the Road Improvement organizations in the country. The delegates to the Editorial Convention will represent those sections that have not regularly organized societies. Hotel accommodations will be furnished at reduced rates. The meeting will be entirely informal, so that all who choose to can be present and take part in the proceedings. There will be interesting exhibits of road-making machinery and in practical road-building.

The tables for our exports and imports for the 10 months of the fiscal year ended April 30, are now compiled, and show that there has been a falling off of \$174,360,742 in our imports, from those of the corresponding 10 months of the previous year, while our exports increased to \$754,606,522, or \$53,590,147 more than for the similar 10 months of 1893. This was in spite of a falling off of \$29,426,062 in the value of wheat and flour exported. Cotton exports gained in value \$25,843,163; meat products \$7,151,123; and \$1,279,599; and vegetable oils, \$1,731,421.

TAKING the preliminary estimates and the final results of the crops for the past nine years as a basis of calculation, the Statistician of the New York Produce Exchange figures out from the reports up to date that there are 22,639,854 acres of winter wheat, and 32,965,906 acres altogether, which, at last reported condition, will yield 413,741,385 bushels, as against 396,132,000 bushels last year. He also calculates that there are 27,027,576 acres of oats, which will yield 710,825,248, as against 638,885,000 bushels last year. (CUT)

THE Australians are making great efforts to capture the American wool market which will be opened to them by the passage of the Wilson Bill. They think it will be of great benefit to them, and they are paying special attention to wools suitable to American manufacturers.

INGRAINED SELFISHNESS.

The New York *World* thinks "the Texas wool men at San Antonio showed a lamentable lack of the true Tariff Reform spirit in demanding for themselves the same measure of protection that has been accorded to the producers of raw material in other States." There spoke the *World's* selfish meanness. It is owned, body and soul, by the New York importers. They furnish the money by which it is sent through the country by millions, to disseminate its demagogic falsehoods. It is the champion and advocate of the men who want to be put into position where they can squeeze toll out of everything raised in the country, or bought for those who are doing the country's work. It wants the importers—not the wool growers and manufacturers of the Nation—to have a percentage on every article of clothing or house furnishing used by our people. Consequently, anybody who wants to keep a little profit to themselves and not to give up everything to enrich the New York middlemen, "lacks the true spirit of Tariff Reform." To believe that it is better to have the Texas farmers make a few cents a pound raising wool than to have a few New Yorkers grow rich buying it from Australia is to be a traitor to Tariff Reform. This is concentrated selfishness. The Texas wool growers pleaded for scant, simple justice. They object to being robbed for the benefit of a few selfish middlemen, and the *World* denounces them for asking for the commonest rights of American citizens. Why should they want to make money which the New York importers ought to have? "You selfish thing," said the little girl, "to take that piece of cake. I wanted it myself."

WHILE Senator Kyle voted for a moderate protection on wool, he deluded himself, and tried to do the same with the men to whom he will send his speech, by claiming that if wool were made free, the farmers would gain more than they would lose on account of the greater cheapness of clothing, blankets, etc. The error of this claim has been fully exposed by THE AMERICAN FARMER. Only a very small portion of the difference in the cost of clothing between this country and Europe can, with any degree of honesty, be charged to the duties on wool. Let us admit, for example, that a suit of clothes which costs \$15 in England sells for \$30 here. This is not true, but we will make the case that strong, so as to take away all grounds of cavil. The suit does not weigh to exceed seven pounds, of which less than four pounds are wool. We will say that four pounds of wool in cloth represents 12 pounds of raw wool. At a duty of 11 cents a pound this would represent but \$1.31 of enhanced cost. This would leave \$13.69 to be accounted for, as protection of our tailors and clothing makers against the English "sweaters." Therefore, at the very most, only \$1.31 should be charged against the wool growers, and the remaining \$13.69 against the manufacturers and operatives.

Free wool can therefore make only the smallest possible reduction in the cost of clothing, so long as the manufacturers and makers receive high protection. It requires considerable effrontery on the part of Kyle to talk as he does.

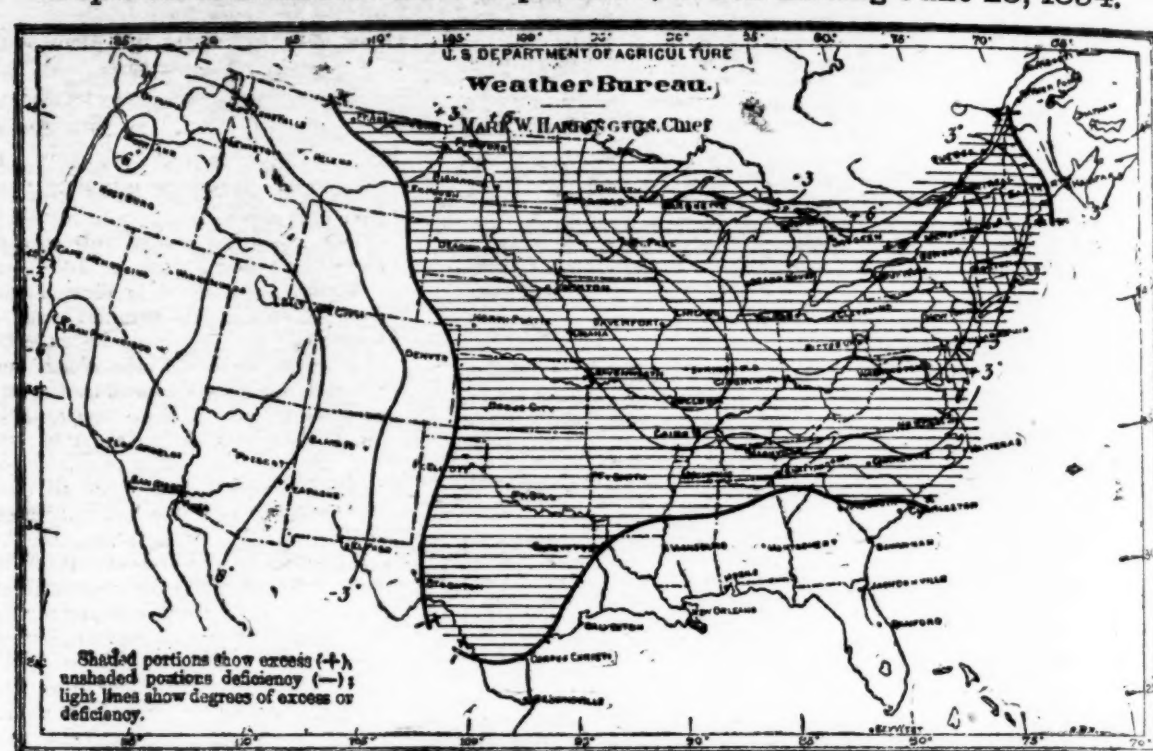
THE Louisianians are naturally very indignant over the rice schedule, which they claim will ruin that great industry. The McKinley bill made the duty on uncleaned rice one and one-half cents; the Wilson bill made it one cent, and the Senate now reduces it to three-quarters of a cent. Paddy rice, which paid three-quarters of a cent duty per pound in both the McKinley and Wilson bill, is reduced to one-fourth of a cent.

ANOTHER precious piece of hypocrisy is the protection, given shoddy. For years the country has rung with denunciations of shoddy, and Jerry Simpson's grand spectacular exhibition of the shoddy overcoat is still fresh in people's memories. Yet shoddy is carefully protected with a 15 per cent. duty, while the honest wool grower is stripped of all favor.

If the \$300,000,000 which we send abroad every year for farm products were distributed among our own farmers, farm mortgages would soon be a thing of the past, and the farmer be again the bone and sinew of our prosperity.

CALIFORNIA will be profoundly injured by the free wool schedule. She has \$75,000,000 invested in sheep, and the industry employs 80,000 people.

Departures from Normal Temperature, Week Ending June 25, 1894.



Departure from Normal Rainfall for Week Ending June 25, 1894.



WASHINGTON, D. C., June 26, 1894.

TEMPERATURE.

The week ending June 25 has been much warmer than usual in the Northern States east of the Rocky Mountains and from Virginia westward to Missouri, the greatest excess in temperature occurring over the States of the Lake region and from New York southward to Virginia, where the daily temperature ranged from 6° to 9° above the normal. Over the greater portion of the Southern States the temperature differed but slightly from the normal, while the week was cool in all States west of the Rocky Mountains.

In California the cool weather retarded the ripening of fruit, and some injury to growing crops resulted from high winds. The warmest portion of the country east of the Rocky Mountains was the southern portion of the Middle Atlantic States, extending from Pennsylvania to North Carolina, where the maximum temperature reached 98°.

Although the average temperature in the States of the upper Mississippi Valley was decidedly above the normal, the maximum temperatures of the current week were lower than those of the previous week.

PRECIPITATION.

During the past week the rainfall has been in excess over Kansas and Nebraska, over small areas in the Lake region and upper Ohio Valley, and over the greater portion of the east Gulf States and Florida. Timely rains also occurred in North Dakota and the northern portions of Minnesota, but drought prevailed in the southern portion of the latter State.

The rainfall was very light in southern New England and the Middle Atlantic States and in the southern portions of Missouri and Illinois, where growing crops are much in need of rain.

Generally the week was favorable throughout the cotton region, and crops were improved, except in portions of Tennessee and Kentucky, where drought conditions prevail.

Throughout the principal corn States the weather was especially favorable. The threatened drought has been followed by generous rains which leave this crop in a promising condition.

SPECIAL TELEGRAPHIC REPORTS.

New England.—Warm and average sunshine with heavy frequent showers in north portion and little or no rain in south; favorable weather for crops except where being injured by drought; haying begun in south, with light crop in old fields; meadows better.

New York.—Very warm; generally quite sufficient showers; crops made splendid growth.

Washington, D. C.—"Down with the Fences"

J. A. Dickson, West Grove, Iowa.

Now the party priest who thinks that the party is a thing, will be a little in love.

For his creed is obsolete.

Now the Christian who a friend

Where he once beheld a foe,

Christ is coming back to earth

And the fences downward go.

Long the sects have gone astray

Long the sects have gone astray

Long they builded far and form

From his sayings in the storm.

Long they built their fences high,

In their zeal for creed and law

May the Christian build anew

On the sayings of the Lord,

For more love in the Church

All that love the Lord to find

In the liberty He gives

Sweet employment for the mind.

No more dogmas prominent,

Love to God and man the test,

And the teaching be of things

Jesus on the Mountain blest.

corn catching up rapidly; potatoes fine; grass and clover good; some oats rusting; fruit fine; tobacco setting begun.

New Jersey.—Fine weather; conditions for growth, haying, and cultivation have prevailed; beneficial showers in central and northeastern sections; hail in Morris and Cumberland Counties did slight damage; wheat harvest begins this week; haying general; oats heading, affected with rust and loc.

Pennsylvania.—Conditions favorable for growth and most favorable soil; some wheat harvested, heads well filled and average crop expected; haying in progress, quantity and quality below average; all crops improving.

Maryland.—Temperature and sunshine above average and rainfall below; wheat harvest progressing rapidly and thrashing commenced; yield average and quality excellent; hay harvest well advanced and crop fair; corn greatly improved; oats generally poor; buckwheat sown.

Virginia.—Temperature and sunshine above normal; rainfall generally light and local, except heavy thunder showers about Richmond and Norfolk; drought becoming serious generally; wheat harvest generally completed; crop short in quantity but fair in quality; oats and grass generally very poor.

North Carolina.—With temperature above normal and generous showers the week has been favorable; cotton seedling small, but growing rapidly and blooming; laying by corn begun; tobacco poor; all crops unusually clean and well cultivated.

South Carolina.—Rains were poorly distributed and drought continuing; general improvement is noted for all growing crops; cotton small, but doing well; early corn will not make more than a crop.

Georgia.—Weather warm and reasonable the past week; local showers have occurred every day, affording temporary relief from drought; corresponding improvement in crops; rainfall is still insufficient to properly wet the soil.

Florida.—Temperature deficient; precipitation generally above normal and fairly well distributed, but deficient in western and extreme southern portions; rains have greatly improved field crops, groves, and gardens.

Alabama.—Most favorable week of this season; temperature about normal and good rains; cotton very much improved; oats harvest about completed; late corn looking much better; vegetables and melons doing well; crops clean and well fruited; early corn good but late corn not promising; gardens and potatoes below average in the north; wheat and corn crops improved; weather generally good; crops improved; late corn looking much better; vegetables and melons doing well; crops clean and well fruited; early corn good but late corn not promising; gardens and potatoes below average in the north; wheat and corn crops improved; weather generally good; crops improved; late corn looking much better; vegetables and melons doing well; crops clean and well fruited; early corn good but late corn not promising; gardens and potatoes below average in the north; wheat and corn crops improved; weather generally good; crops improved; late corn looking much better; vegetables and melons doing well; crops clean and well fruited; 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THE GREATER CONGRESS.

Farmers Discuss the Topics Which Interest Them.

UNDER THE FIVE-MINUTE RULE.

Ole J. Hazen, Hendrum, Minn., thinks that Congress ought to do something for the most of the farmers, and do something for the people, instead of wasting, or worse than wasting, its time in discussing the merits of the country and draw its salaries. It is a wonder that Congress is so slow in passing money for the people.

WHAT PROTECTION WOULD DO FOR SUGAR BEETS.

THE AMERICAN FARMER: We cannot do without such a valuable paper as yours. Its reading matter pertaining to agriculture, horticulture, beekeeping, sheep-raising, protection to the farmer, and a multitude of other subjects is invaluable to all of the producers of the products of the American farmer, and against the competition of the foreign labor of foreign countries, meets its need. The State of Nebraska alone can afford at least one-fourth of the sugar produced in the United States, for experts have found it has a soil and climate as well adapted to this industry as any State in the Union.

Twenty-five millions of gold might be added to the wealth of this State annually, instead of sending abroad to buy this article, if Congress would encourage this industry by a bounty of one cent on the pound for 10 or 15 years; then it would take care of itself. Kansas, Michigan, Iowa, and Indiana could more than supply the other three-fourths required for home consumption. This industry would give additional employment to a vast number of men, and would require very little money to start. It would require only \$100,000,000 of gold annually from flowing into the vaults of foreign powers.

There are millions of acres in Nebraska that will produce \$100 worth of beets annually per acre. This has been proved by the State of Nebraska. Instead of obtaining this amount per acre, we are growing 35 cents wheat, which pays but \$5 or \$10 per acre; and another important feature, which is generally overlooked, in regard to this industry, is that we can grow a crop of beets in the same soil as wheat, and other crops have proved almost a failure, for they require much less moisture to mature a good crop than other agricultural products. They root from 12 to 24 inches deep, and we need a very porous soil. In the West, they obtain much of the required moisture from below; and as beets do not require deep cultivation, the surface earth will extract moisture enough from the atmosphere to keep them growing finely for 40 or 50 days without rain; i. e., after they are fairly started. It is therefore the surest and most profitable crop that can be produced in any State in the West. And if it was properly encouraged it would relieve the overworked cities and annihilate the free-soup houses, for it would give a profitable outlet for the surplus of every commonwealth in our broad land. Ten acres is all that any one man would require to procure a comfortable living, and millions of acres in the great West could be reclaimed by means of irrigation and utilized in growing beets and raising livestock. It is a pity that we are not more wisely buying abroad, and thereby originating financial panics, bankruptcies, business depression, riots, strikes, and many other gigantic evils that confront us to-day.

The real cause of our present financial state and paralysis of almost every line of industry is so plain that the most stupid can hardly fail to see them. As agriculture is the real source of all wealth, if this great and varied industry is ignored, discouraged, neglected, and exposed to the competition of the pauper labor of all other countries by the un-American and unpatriotic lawmakers of the people, universal and inevitable disaster must inevitably follow.

England, free trade as she is, instead of issuing bonds to obtain the \$2,000,000,000 deficit in her needed expenditures, her lawmakers have nerve and courage enough to raise this amount by way of tariff. Ought not our present Congress to do the same? Should we not be as patriotic and patriotic as they, and place the tariff high enough to insure a revenue that would defray all the essential expenditures of the Government?

I wish THE AMERICAN FARMER the greatest possible success in circulation.—B. F. CARROLL, Normal, Neb.

HOW THINGS LOOK IN OHIO. EDITOR AMERICAN FARMER: We are having it quite dry for this time of the year. Showers are light, but everything looks prosperous. Wheat looks well; so does rye. Corn is nearly all planted. Ground in fine condition for planting. (This season in March look rather thin on ground; but now it is up and looking fine. Potatoes are up and look fine. There is a fair prospect for plenty of apples, pears, and grapes.

All we want is a tariff of 12 cents a pound on all grades of wool, and 20 cents on shoddy, and two cents on rags. And what we want is a new set of men in the Senate; or abolish it. They are too old for the times. They got rich, and what do they care for country.

I like your paper because it is plain print and plain talk. It will be 72 years of age in September, 1894.—R. C. KIMBALL, Remond, O.

"Hard Times." EDITOR AMERICAN FARMER: In your issue of May 1, I wish to note the conditions of the political situation has little or nothing to do with the present hard times, but attributes them to other causes. Other causes may have made some contribution; but let us suppose that the first of April it is judged as to what extent the political situation may be an insignificant factor.

Suppose that free trade in all its true sense had been prevailing for a number of years, and all the conditions of trade had become adjusted to the situation. At length, a party comes into power who favors protection, and a bill to that effect is up in Congress, and discussion upon it drags through weary months. How will business men reason upon it? Will they be likely to say, "This bill, if passed, is going to ruin or greatly injure my business. I must shut down my mills." Let history decide the proposition. The Walker (free trade) tariff bill was passed in 1856. In one of President Buchanan's succeeding messages to Congress, he expressed himself, in substance, that with the country paralyzed with resources of all kinds, yet a business rested upon all avenues of trade and protection was necessary for the country prospered for years. Gradually, however, business declined. Some claimed there was not a sufficient amount of protection. Others felt that the unrestricted free trade would result in a depression. Finally, the McKinley bill was passed. It raised the duties on many articles, and put a duty on some that were free. While it was pending, how general shut-downs of mills and factories? And when it was passed, how did business keep going until—well, now let us suppose there comes a change of administration, which passes a bill to change this economic principle, and a bill is up in Congress to introduce free trade. How will manufacturers be likely to regard it? Knowing as they do that manufacturers in their line in other countries pay duties, they will say, "You are the thief!" and the man confessed.

that they would reason thus: "This bill, if passed, will compel me either to shut down my mills or pay less for help, for I will be compelled to act as cheap as foreigners." Not only that, but would they not also meet the following perplexity: Would they not reason, "But what shall I do while this bill is pending? I am obliged to keep constantly on hand a stock of goods to fill the orders I receive or solicit. Whatever time the bill is passed, I must sell my goods at little or no profit, and perhaps at a loss. I must take measures to avoid that. I will either shut down my mills or reduce the wages I pay, so as to meet the situation when it comes."

Are not the conditions of the latter supposed case being actually experienced? It may be said that orders are placed prior to manufacture. That is true only in the case of certain kinds of goods. But even in the case of advance orders the situation is not helped materially, as orders will not be given, until to meet the "hand-to-mouth" demand, in anticipation of the cheaper goods of the impending free-trade bill.

Suppose that the present panic was caused by a glut of production. Now, as everyone knows, that goods are becoming cleaned out, why don't manufacturers more generally start work? If, as has been charged, Republican manufacturers stopped work to make party capital, if the Democratic ones believed that free trade would make business better, why didn't they keep right on working and so reap the golden harvest that would surely be theirs if the country was not afraid of the free-trade bill?

Mr. McDonald's statement that Tennessee had reached the bounds of its material development, with the supposition that it was the same in other parts of the country, was a surprising one. What, with the millions of acres of yet unoccupied excellent land, the steady growth of population, has the highest point of material development, with its demand for products, not only to keep pace with that development, but also with the wear and breakage of tools and materials, ceased?

If Mr. McDonald could come to Armstrong County, Me., and observe the stream of agricultural instruments continually going from the villages to the surrounding farms, he would conclude that it would require pretty big stores and warehouses to hold what the community would require for the next 20 years.

I saw not long ago a statement to the effect that there existed communities in Tennessee so remote from railroads that the people were living in the primitive style of our forefathers. All over the Southern States are immense tracts of wild lands awaiting settlement. Let railroads be built to these communities and these lands, and there will be a demand for a few more cross-ties.—Geo. E. PLACK, North Perham, Me.

A Fine Crop.

The Independent Ice Co., of Washington, D. C., has a fine stock farm in Prince George's county, some five miles east of the historic town of Bladensburg. Mr. W. H. Yerkes is the Superintendent, and a very capable, wide-awake, progressive farmer. He recently sent into the office of THE AMERICAN FARMER some specimen samples of magnificent rye and a field of 35 acres on the farm. The stalks are fully seven feet high.

A HUGE POTATO PLANTATION.

Two Crops a Year, Aggregating 50,000 Barrels, Grown Without the Use of any Fertilizing Material.

A potato plantation of 700 acres, on which two crops, aggregating about 50,000 barrels, or 125,000 bushels, are annually grown, is difficult to imagine. Such a one exists, however, and its virgin soil is so rich that abundant crops are raised without the use of any fertilizer. This great potato farm is in Ashwood, Maury Co., Tenn., about six miles west of Columbia and 15 miles south of Nashville. It is a part of the old Polk Estate, owned by the ancestors of President Polk. Colonel William Polk, originally of North Carolina, a Revolutionary officer, took up 5,000 acres of Government land in 1787 and gave each of his sons 1,000 acres. Among the sons was the Rev. Leonidas Polk, once the Protestant Episcopal Bishop of Louisiana, who was a Confederate General during the rebellion, and was killed at the battle of Pine Mountain, Ga. His 1,000 acres and an equal number owned by one of his brothers were secured by Clawson & Stevens, a firm composed of two enterprising young men from Indiana, about 10 years ago, with the intention of ultimately using it all for raising potatoes.

It was in a state of complete neglect and densely overgrown with shrubbery and tangled briars. The native whites laughed at the young "Hoosiers" and predicted their complete failure. The partners set resolutely to work, however, cleared the land and cultivated it as fast as possible. The first crop of the year is from 28,000 to 30,000 barrels, and the second crop, for which only 500 acres are planted, from 20,000 to 22,000, making a total of about 50,000 barrels, or 125,000 bushels a year. Clawson & Stevens employ about 100 negroes, many of whom are women, and have 85 giant mules. They have a factory on the plantation in which all the barrels used by them are made. Mr. Clawson says their present crop is unusually large, but that, as the crops of Kansas and Mississippi are short, he expects to find ready and profitable sale for his entire product.

Chemistry as a Detective.

A Budapest manufacturer has informed the police that he possesses a powder with which thieves can be caught. Having for the last few days made the unpleasant discovery that his cash box was plundered day after day, and failing in all his attempts to catch the thief, he applied in his dilemma to Mr. Telek, Professor of Chemistry at the Franzstadt Commercial School, and the latter gave him a powder which he sprinkled over his cash every night before leaving the office. This powder has the peculiar effect of dyeing the skin blue, the color being intensified by washing, while it resists the application of soap. On the very first day of manufacture noticed a deficiency of eight crowns in the silver cash box. He at once called his employees together and ordered them one by one to steep their hands in a basin full of water got ready for the purpose. One of the men was very loth to follow the example of his comrades. At last he consented, when, no sooner had he dipped his hands in the bowl, than he turned dark blue! His employer stepped up to him and said, "You are the thief!" and the man confessed.

SORGHUM SIRUP.

Some Suggestions and Directions as to Its Manufacture.

EDITOR AMERICAN FARMER: In an article on "Sorghum" in THE AMERICAN FARMER of May 1 I promised to write an article on the manufacture of molasses.

Sorghum since its first introduction into the United States in 1854 has passed through several critical stages. The new plant was heralded with a flourish of trumpets, and the expectations of the farmers of the North and South excited to the utmost by the representations made of its remarkable qualities and value. Not only was sorghum of the best quality promised, but sugar *ad libitum*. Thousands all over the country rushed into the cultivation of the new gold-bearing plant, and the result was sharp and decisive. With little or no knowledge of the plant itself or the proper cultivation thereof, and totally without experience as to its manufacture into sirup, and with no proper appliances or machinery, millions of gallons of black, unpalatable sirup was made, glutting and destroying the home market, and of course finding no sale in the general market. Then its cultivation was as rapidly abandoned as it had been taken up. But of late years people are finding out what there is in cane, and the outlook was never really as promising as now.

Whilst the hope of making sugar from sorghum profitably has not been abandoned, the reasonable expectation of cane growers is now to supply the home market with sirup. It is beginning to be understood that a market can readily be found at home for a good article of sirup, and as none else is wanted, its manufacture is gradually coming into the hands of those who are willing to give the requisite care to it, and who have apparatus needed to give good results.

Thousands of operators throughout the country are now making sorghum sirup equal in appearance and taste to the best refined sirup. Starting with small, horse power outfits, they have been obliged by the increasing demand in the home market to enlarge their plants year after year, till now they run steam outfits costing from \$5,000 to \$6,000, and make money.

If sorghum growing in the United States was general in all sections where climate and soil were favorable, and the best machinery and skill used in its manufacture into sirup, sorghum sirup would soon monopolize the home market, and in the end bring its value in the general market.

There would be at times in some sections an over-production in this crop, as in all others, that would make it temporarily unprofitable; but this would regulate itself, as in other crops.

A fine table sirup, equal in appearance and taste to the best golden sirup, and of course in every way superior to the ordinary grades of molasses, may readily be made from cane, and is made every year by thousands of operators throughout the country. This sirup is more desirable for family use than the best refined, for it is not only good, but it is pure, while an adulterated sirup is seldom, if ever, to be obtained at any price. To insure success, the sirup must be good. The juice should be taken immediately from the mill to the evaporator for boiling down.

The mill, evaporator, filtering tank, coolers for the sirup and all vessels and utensils needed should be held in readiness before the cane is ready to be worked up, and kept perfectly clean throughout the whole time of sirup making. The evaporator should be scraped and cleaned every day.

All tanks and other vessels in which the raw juice may be held should be of zinc or galvanized iron or tin. If wood is used it soon becomes soaked, and then is too hard to be cleaned thoroughly. The particles of cane or dirt in the juice as it comes from the mills may be filtered off by means of a straw filter. (A box or half-barrel with straw in the bottom, held down by a stone, makes a simple one.) The filter should be frequently cleaned, and the straw or cloth used washed in water. To make a light-colored sirup of the best quality, the juice must be taken fresh from the mill, filtered, and properly treated with lime (a little lime in water and add two or three gills, which is plenty, to every 50 gallons of juice), and then boiled down in the shortest possible time to the density wanted.

If no lime is added to the juice, then the impurities in the sirup will not half come out. The lime defecates the juice; that is, it separates it from the impurities. Unless this is done, failure is certain. Don't allow the boys to stir up a bucket full of lime and add what their fancy dictates, but use care and judgment in adding lime, and success will crown your efforts. The rough stuff, such as pieces of cane stalks, etc., the filter removes, but the acids and other impurities can only be freed from the solution by chemical action and heat.

Fill the evaporator with water, build the fire, then remove the plug or open the faucet at the hind end of the evaporator pan, letting off the water slowly, at the same time open the faucet in front, allowing the cane juice to flow in as the water recedes. Don't let it flow too fast, but regulate the flow so that by the time the juice reaches the hind part of the pan it has been boiled down to molasses. Keep it well skimmed, but you don't need to stir it at all. Let the juice flow constantly into the evaporator and the molasses flow constantly out at the hind-end faucet.

If you purchase a mill made by reliable manufacturers it will press the cane so dry that you can use the bagasse (pressed cane stalks) for fuel, thereby saving many dollars worth of wood. I will repeat my explanation in other words: To secure a continuous process,

let in enough water to protect the pan from burning until boiling shall commence all over the pan. Then partly open the faucet in the juice tank, letting the juice slowly follow the water through the channels of the pan. So equalize the flow with evaporation that the sirup, on arriving at the outlet, may be finished. The juice should be kept below the tops of the ledges in the front end, and as shallow as possible at the finishing end. As the juice becomes more dense, the foam will rise so as to cover the ledges and fill the pan, but the mass of the liquid, in an under current and unskimmed, continues its regular onward flow through the channels. Skim it every time. If a regular heat is kept up and the flow of the juice is properly regulated, no change of gates, faucets, or plugs need be made during the day, and the sirup may be made to flow off uniformly at any density desired. Usual density is about 36° Baume. Keep up a hot, regular fire. Use the gates to regulate the flow of the juice, so that in the finishing departments there may be the smallest quantity possible. Let the supply from the faucets and gates be equal to evaporation, and no more. In using this process be careful not to change the gates too suddenly, and guard against flooding in any of the departments, as it causes a mixture of juices and requires a longer exposure to heat, thereby rendering the sirup dark in color and impure. In drawing off the sirup care should be taken not to allow the last channel to become exhausted without a supply to follow.

Aim constantly to have the operation continuous. As long as boiling is kept up through the center of the pan there can be no mixture of sirup or scum and juices. Foam and bubbles may be thrown over the crimps through the center, and if a high heat is kept up they will remain on the sides until taken off. In closing for the day let water follow the juice until all the latter is reduced to sirup, then wash the pan, and filling it with clean water let it remain so over night, and use to commence next day's operation. If ashes accumulate under the pan, remove them, as they endanger the pan in burning. Don't allow the wind to blow over the pan, else evaporation is retarded. Always keep a high heat under the center of the pan, as high heat removes the impurities from the center to the sides, where it can be removed with a skimmer.—IRWIN J. BAILEY, Freeburg, Pa.

SORGHUM.

A Crop of Rapidly Increasing Values in the West.

Sorghum is rapidly rising in the estimation of the farmers of Kansas and Missouri, especially of those fortunate enough to live near sugar mills.

Farmers living within a radius of 20 miles of Fort Scott, where is located the best sugar mill in the West, sold their crop last year for \$30 to \$40 per acre, net, for the cane and seed. Mr. C. F. Drake, who has fostered and protected the Fort Scott Sugar Works with his time and money, declares it his opinion that sorghum cane will be and now is the best crop that can be cultivated in Kansas. Speaking of this new enterprise in the West, Mr. Drake said: "Doubtless those who are not conveniently located to the sugar mills will not feel encouraged to raise this crop. But it is well known that through Nebraska, Iowa and parts of Missouri neighboring areas are combining and securing mills to work up the cane, as the molasses is becoming more and more popular and being sought after by dealers and jobbers in the large cities. Only a few years ago it was almost impossible to sell a barrel of sorghum molasses, but to-day it is worth from 25 to 30 cents per gallon by the carload. If the crop was raised for sirup alone it would pay better than any other crop, as no drought for the past 10 years has affected the yield to any extent."

Aside from its value for molasses, the seed is fast becoming an article of trade. Throughout Kansas it is fast taking the place of millet for feed. Many farmers are sowing it for forage for stock, and the results are very satisfactory. It is the experience of many farmers and stockmen that cattle can be fed through the entire winter on cane fodder, and come out better in the Spring than on any other feed, except corn. A seed firm at Fort Scott reports that they paid \$1.10 per bushel for the first crop ever raised in that vicinity, and have paid as high as \$1.50 for cane seed. This firm reports about 35,000 bushels of seed raised near Fort Scott last year, and this seed was bought by grain dealers at from 75 cents to \$1 per bushel, several farmers getting as much as \$1,000 for their crop. This cane seed is sold to parties in Texas and Western Kansas, where it is sown in tracts of from 10 to 500 acres for fodder for cattle. Many stockmen in Texas purchased as much as 1,000 bushels for their own use.

More than 15,000 bushels of seed have been shipped to Western Kansas. The Fort Scott seed firm, many of the far-western Counties, where other crops fail on account of drought, taking as much as 8,000 bushels.

The Fort Scott paper mill has been using the stalks or bagasse, after the juice is pressed out, as the only article for making paper. Last year this company sent teams out over the country and gathered up this waste at a nominal cost, and have since been converting it into the finest quality of manilla wrapping paper.

Nurserymen and the Tariff.

Discussion of the tariff was the leading business before the meeting of the American Nurserymen's Association at Niagara Falls. The majority were strongly in favor of a high protective tariff, but the opinion was general that no tariff at all was preferable to the mangled and insufficient provisions of the Wilson Bill.

THE TARIFF.

Discussion of the Agricultural Schedule. JUNE 8.

At the suggestion of Mr. Washburn (Rep., Minn.) it was agreed that the further discussion of the agricultural schedule should be under the five-minute rule; and Mr. Harris gave notice that when the schedule was disposed of he would ask the same rate to be applied to the three succeeding schedules, until the wool schedule was reached.

Paragraph 190, fixing the duty on buckwheat, corn or maize, cornmeal, oats, rye, rye flour, wheat and wheat flour at 20 per cent. ad valorem and on oatmeal 14 per cent. ad valorem, was agreed to.

The duty on macaroni, vermicelli and all similar preparations was fixed at 20 per cent.

RICE.

The next was paragraph 193, as to rice. The bill as it passed the House, and as it was reported from the Finance Committee, made the duty on cleaned rice one and a half cents a pound; on uncleaned rice one cent, and on rice flour and rice meal one-quarter cent a pound. Mr. Jones (Dem., Ark.) who had on behalf of the Finance Committee offered an amendment, reducing the rate on uncleaned rice to three-quarters of a cent a pound, and on paddy to one-half a cent a pound, withdrew that amendment, which was thereupon renewed by Mr. Allison (Rep., Iowa). The amendment was rejected without division.

Mr. Dolph (Rep., Ore.) moved to apply to rice the same provision as was applied to wheat, oats, etc., admitting it free of duty from countries that do not impose an import duty on rice from the United States. It was a somewhat amusing discussion, in which Mr. Palmer, as usual, bore a prominent part, the vote was taken on Mr. Dolph's amendment, and it was rejected; ayes 1, (Mr. Peffer), nays 54.

The next paragraph was No. 191, "Barley and barley meal, put in bulk, 25 per cent. ad valorem; barley malt, 35 per cent. ad valorem."

The amendment of the Finance Committee was to increase those rates to 30 and 40. After some remarks the Committee amendment was agreed to.

Mr. Hale read the names of the Democratic Senators who voted "no" on Mr. Dolph's amendment, and the names of the same Senators who had voted "aye" on exactly the same provision on the paragraph as to buckwheat, oats, etc. Within 24 hours, he said, these Senators had, every one of them, turned tail and voted the other way. The people of the North would take account of that matter.

Mr. Mills (Dem., Tex.) replied to Mr. Hale. He had listened with great interest to the cry thrown across the chamber of sectionalism. Whenever that cry was raised, he regarded it as the cry of "stop thief!" It was always raised by someone who was fleeing before the police with stolen goods under his shirt. A long discussion followed between Senators Hoar and Mills.

For the remainder of the day's session there was a constant interchange of personal and political attacks between Senators on opposite sides of the chamber, which caused much amusement to the galleries.

BUTTER.

The rice paragraph was agreed to, and then came paragraph 194, "butter and substitutes therefor." The House bill fixed it at four cents a pound, and the Finance Committee agreed to leave it at that.

Mr. Pettigrew (Rep., S. D.) moved to make it six cents a pound. That amendment was rejected, 24 to 29.

CHEESE, MILK, ETC.

Cheese, in the next paragraph (195), was changed from 25 per cent. ad valorem to four cents a pound.

Mr. Jones (Dem., Ark.) had reported an amendment to insert as a new paragraph, "Milk, three cents a gallon," but he withdrew it.

The paragraphs on milk, beans, etc., (196, 197, and 198) were severally agreed upon. Mr. Jones withdrew his proposed amendment putting duties on broom corn, cabbages, cider, eggs, and yolks of eggs.

Mr. Platt moved to put eggs on the dutiable list at the rate of three cents a dozen. The amendment was rejected.

STRAWS.

Land cannot be made too rich for onions.

Egypt has 3,450,000 date palms producing 300,000 tons of fruit.

Butter has not depreciated in price like grain. It is higher now than when wheat was \$1 and rye and corn 60 cents a bushel.

Kansas has paid out \$60,000 in bounties for wolf scalps during the last four years, and the payments are increasing in amount annually.

If the heavy hog has any day at all it is in the winter. Nobody wants anything of him during the rest of the year. Then the medium sized hog is boss, and the one that brings in money.

Frogs are mainly money. If they try to make more than a short journey away from moisture they will perish for want of water, and then their bodies will dry away. The frog's bones are so soft that they scarcely leave any skeleton.

On the island of St. George, one of the Pribilof group in Behring Sea, the breeding of blue foxes has become very profitable. They generate very rapidly, and when an island of good size once becomes well stocked it is impossible to deplete it, as the law provides that they must not be shot, but trapped, the restriction being imposed mainly to keep them tame.

An operation upon a patient revealed the fact that the disorder was due to the presence of tooth-brush bristles. "Cheap tooth-brushes," remarked the Surgeon who had charge of the case, "are responsible for many obscure throat, stomach, and intestinal ailments. The bristles are only glued on, and come off by the half dozen when wet and brought in contact with the teeth."

The New Slavery.

When the Southern planter and the Western ranchman are supplanted by farmers; when a diversified system of agriculture takes the place of the one-crop and one-branch system of farming, there will be a permanent prosperity established beside which the present system will be as foolishness.

When grass is made the basis of wealth in the South, diversified farming the practice and aim of all, then shall improved cattle and sheep occupy the land and become a factor of high farming. Not till then will the Southern farmer cease to be a victim of the "general merchant," the Shylock, who manages to get the entire results of the year's labor of the planter, minus what he, his wife, children and hired laborers eat and wear. The war released from slavery the negroes, but the Jew merchant of the South holds the whites and blacks in servitude as cruel, as certain, and without a ray of hope that there will be a release except at death. This bondage is possible only under the one-crop system—the cotton crop—that prevails in the South. The planter is obliged to mortgage the unplanted crop, the teams and tools with which to raise the crop, to the merchant for food and supplies. If the crop fails to pay out it is secured by note at fearful rates, and he begins a new year on the same basis again—the mortgage system. The results are the merchant gets rich and the planter gets poor, and stays so.

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free, consisting of Pack of Trick Cards, two Magic Keys, Devil's Bottle, Trick Camera, Latest Wire Puzzle, Book of Magic. Total value sixty cents, and Large Catalog, will be sent for ten cents to cover postage. Write to Ingersolls, 67 Cortlandt St., New York.

NEW PUBLICATIONS.

KORADINE LETTERS; A GIRL'S OWN BOOK. By Alice B. Stockham, M. D. Published by the author, 377 Madison Street, Chicago. Price \$2.50.

Koradine Letters reveals progressively the development of a young girl in body, mind, and spirit. It includes family and social life, a rational method of education and the knowledge of spiritual law. Koradine is a bright girl, alive to impressions, quick in discernment and clear in intuition. In telling her story she carries the reader into philosophy, metaphysics and the conduct of life. Her parents, like Froebel, lived with their children, and if she evinces wisdom beyond her years, it must be attributed to the fact that they never withheld wisdom from her. Really, most children are wiser than they get credit for, because they are not encouraged in expressing their ideas. Koradine is a natural girl among natural things, and here is a story of a glad heart that must carry gladness to all who understand her meanings. Koradine Letters by gradual sequence develops a philosophy of real happiness, at the same time teaching that bodily health is possible to all, that physical ailments may be prevented and relieved. The book is full of humor and pathos, while the serious and important object is never lost in the story. It gives the art of true living and the power to meet every difficulty.

POTTER'S GOOD ROADS LIBRARY. Published monthly by James B. Potter, Secretary New York State Road Improvement Association, Potter Building, New York City. Price 10 cents a copy, 50 cents a volume.

The first number, entitled "Country Roads," profusely illustrated, will be followed by "Highway Bridges," "Telford Roads," "Drainage," etc. The whole series will be a complete guide to practical work, of the greatest value to every citizen.

THE AMERICAN SHROPSHIRE SHEEP RECORD, VOL. IX. Published by the American Shropshire Sheep Association, Morrimer Levering Secretary, Lafayette, Ind. Price 50 cents non-members, \$2.00.

This is the ninth volume, but before the present edition, 44,505 ewes and rams had been registered. This book contains all the numbers between 44,506 and 57,054, with pedigree of each. It also gives the names, alphabetically, with addresses of all members and breeders mentioned in the book. It also transfers reported to the Secretary during the past year.

Notes.

The Hampshire Down Flock Book, Vol. 5, Rams No. 1015 to 1388—1894. Published by Hampshire Down Sheep Breeders' Association, Salisbury, England. Printed by Edward Roe & Co.

The Forum for June publishes a very bright and readable article by Hon. J. Sterling Morton, Secretary of Agriculture, entitled "Farmers' Fallacies and Fallacies." Mr. Morton shows that the agricultural unrest is caused less by agricultural distress than by political and economic fallacies, by which a certain proportion of farmers have been led away from their furrows. Mr. Morton claims that as a class, however, the tillers of the soil are yet the most independent and the most thrifty of all men. The Forum may be had of all prominent newsmen, or from its publishers in New York, at 35 cents.

The Overland for July will begin the 24th volume of the new series, with a special Midsummer number. This will be characterized by a number of striking stories, a larger all-around proportion of verse, and reasonable cutting articles. A short serial of Malay life by the editor, Ronnesville Wildman, will be begun with four striking chapters, duly illustrated. The Secretary of the Madrid Columbian Exposition, Prof. Stewart Cullin, will contribute a chatty article of Sumner street scenes in the Spanish Capital. The Alaskan trip will be entertainingly written up by F. Delaguna. Helen Elliott Bandini will tell of the first Fourth of July celebration in California in a story addressed to Young America. John Bonner will have a strong story of San Francisco life, and Edwin V. Atkinson will contribute a study of a Chinese immigrant from exact material gained as a Custom House Inspector. Col. Charles D. Foster, President of the Arizona Historical Society, and first Delegate to Congress from Arizona, begins a series of four articles on the stirring early days in Arizona under the title, Building a State in Apache Land. Published at San Francisco, Cal. Price 35 cents.

A new "American" paper has appeared under the appropriate and suggestive title of Uncle Sam. It contains 16 pages and is profusely and handsomely illustrated, the first number containing seven full-page cartoons, four of them in color. These are powerfully drawn and well executed, several of them being from the pencil of the well-known artist, C. de Grimm. They are designed to show the dangers that menace this country through assaults on our public schools and other free institutions, the importance of better regulating immigration, and the evils of religion when applied to politics. With religion itself Uncle Sam has nothing to do. It is a clean sheet and promises to strike terror into the hearts of the American cause. The subscription price is \$1 per year. Uncle Sam Publishing Company, 714-716 Schiller Building, Chicago.

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Grain.

CHICAGO, June 29.—The following shows range of prices:

	Open.	High.	Low.	Close.
Wheat	July.....	57 1/2	57 1/2	57 3/4
	September.....	57 1/2	57 1/2	57 3/4
	October.....	57 1/2	57 1/2	57 3/4
Corn	July.....	41 1/4	41 1/4	41 1/4
	September.....	41 1/4	41 1/4	41 1/4
	October.....	41 1/4	41 1/4	41 1/4
Oats	July.....	42 3/4	42 3/4	42 3/4
	September.....	42 3/4	42 3/4	42 3/4
	October.....	42 3/4	42 3/4	42 3/4
Pork	July.....	12 40	12 40	12 37
	September.....	12 40	12 40	12 37
	October.....	12 40	12 40	12 37
Lard	July.....	6 05	6 05	6 05
	September.....	6 05	6 05	6 05
	October.....	6 05	6 05	6 05
Ribs	July.....	6 45	6 45	6 42
	September.....	6 45	6 45	6 42
	October.....	6 45	6 45	6 42

"His house
she enters,
there to be a
light!"

The juice of a lemon, with an ounce of distilled water and one teaspoonful of borax, recommended as a remedy for sunburn.

Keep a cut lemon on the washstand, to assist in removing stains from the hands after meals. It is said, also, to keep hangnails away.

In washing some of the delicate prints which are now in use, it is a good plan to put the fabric into salt water, dissolving three gills of salt in one gallon of water; put the print while hot and leave it cold; this will make the colors permanent.

To take ink out of linen, dip the ink spots in pure melted tallow, then wash out the tallow and the ink will come out with it. This is confiding.

Valuable Remedies.

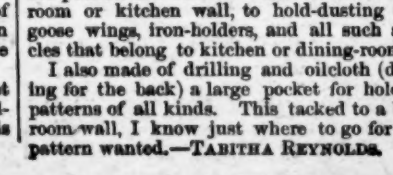
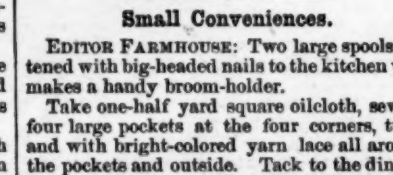
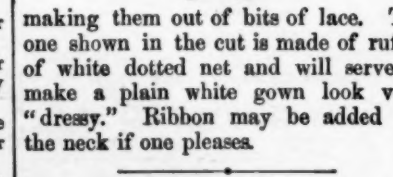
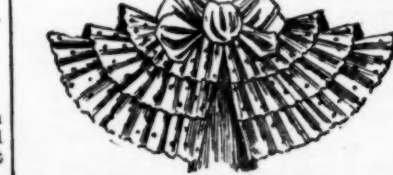
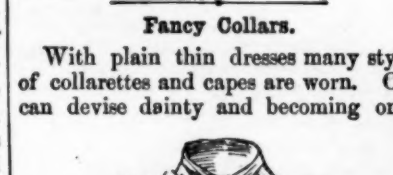
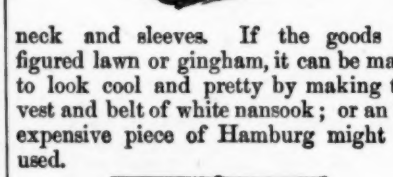
EDITOR FARMHOUSE: To cure poison ivy no matter how bad the inflammation, take fresh plantain leaves and boil to make a very strong tea: it should look as strong as strong tea.

the frames, and paint them over with soft brush dipped in the above mixture. They will immediately come out fresh and bright.

bread, and so on indefinitely. To be successful, of course, your wares must be of first quality, and then orders will come in more than you can fill. Get a barrel of flour and start the business, and then report to The Farmhouse your success.

When writing mention this paper.

scallop, 1 double in last h, ch 5. Make 2 rows going up the side. Make 6 rows before beginning next scallop, join in the center of 1 shell on edge.—ELLEN A. CLAUDE.





WOULD you mind passing the sugar, Aunt Jane? I said I was taking early tea with my Aunt Jane Lambertson. Aunt Jane hastened to push me in demand in her usual prim manner, and I looked at her with a faint smile. I laughed aloud frivolously, and I said what I never should have said in a sober moment: "Aren't we two typical old maids, Aunt Jane, taking our dish of tea together, you know? You with your cat, I with my dog!"

I saw at once that the inspiration didn't take with Aunt Jane at all. She made a straight, hard line of her lips (a bad sign), and buttered a crust with much precision.

"You have an unfortunate way of expressing yourself at times, Elizabeth," she said disapprovingly.

I wish to goodness I could break Aunt Jane of calling me Elizabeth; and the way she does it, too, as if I were all capitals or italics!

Dyon, or whoever it was, must have had Aunt Jane in his mind when he said "woman is a miracle of contradictions," because Aunt Jane can be as nice as possible when she wants to. I believe it is an unwritten law that I'm to be her heir.

"Oh, well, not old maids, you know, Aunt. They have a nice name for it now. Say we're two bachelor girls. Sit up, Dick!" and I bent down to hide my frowning countenance in the effort to balance a lump of sugar on the nose of my beautiful fox terrier.

"No need to say anything at all about it, as far as I can see," said Aunt Jane tartly, making a dreadful, hysterical rattle with the spoons. "If I am single it's purely from choice (it always is with bachelor girls like Aunt Jane). Whether it is with you or not, of course, I can't say, but I suppose that to be 24 and not yet married and some man's slave, nowadays, implies that you are to be an old—er a bachelor girl, Elizabeth."

I stirred my tea reflectively. Aunt Jane likes to see young people serious. "Well, and after all, Aunt," I presently said, "aren't we much happier as we are?"

Aunt Jane was charmed with the depth of this reasoning. "Why, really, Elizabeth," she said pleasantly, "really I do believe you are getting to be very sensible. You are growing so like your dear mother when you come upon me suddenly, or hold your head so, I declare, child, I could be almost certain it was your poor mother before she married your father. Only your mother was a beautiful woman, Elizabeth. You are not."

Now that's so characteristic of Aunt Jane. She raises you up to the seventh heaven only to dash you down to good-ness knows where.

If you were the Venus of Milo Aunt Jane would rather die than let you know it. Of course, I know I'm not a Venus of any kind, but, then, I know I can't be so very bad-looking, because I always have plenty of attention, if I do say it myself, and if I wait for Aunt Jane to say it I will never be told.

"It's a disgrace to be single," went on my aunt, fixing me with her eyes, "then I'm afraid I'm disgraced forever, and by my own fault. I had scores of admirers when I was your age, Elizabeth, and that was not so long ago." (Thirty years or more is a trifling bit of coquetry on the part of time to Aunt Jane, evidently.)

"I'm sure you had, Aunt," I hastened to reply dutifully (and untruthfully), "and perhaps if you had married some of them."

"I could only have married one of them, Elizabeth!" interrupted my aunt in the tone of a stern moralist. "True, Aunt, fortunately for yourself," I said pleasantly. "Would you mind giving me the wafers, Aunt? Thanks. Taking them altogether, Aunt, men are not to be relied upon."

"I don't know much about them now, but in my young manhood were entirely different," declared Aunt Jane, making a ferocious dab at the watercress as though it were the young man of her special aversion. "For one thing, their mothers were not abject slaves to them, and the girls didn't spend all their time running after them."

"Gracious goodness, Aunt Jane!" I exclaimed indignantly, "the girls don't run after them now."

"Oh, don't tell me, Elizabeth," and Aunt Jane tossed her head scornfully. (Aunt Jane's head makes me frantic, it's so aggravatingly neat and ladylike.) "Don't tell me, Elizabeth," said Aunt Jane, "haven't I eyes, haven't I ears? Why, only at the Snowden's tea last week—"

By the way, why weren't you there, Elizabeth? I thought you and Margaret Snowden were such friends."

I pulled poor Dick's ears until he howled, but I wasn't going to tell Aunt Jane that the reason I didn't go to the Snowden's was because I had quarreled with John Chandler and knew he would be there. It is simply impossible to get Aunt Jane to understand a love affair. She gets things so awfully mixed.

Perhaps I might have told her about—well, never mind.

"Well, there was your Margaret," began Aunt Jane again, seeing that I didn't answer. "There was your Margaret, looking rather nice and rather flirtatious; and there was that young John Chandler posing as a lackadaisical as you please. I declare, young men who once get a notion they're good looking are simply unendurable. Be careful, Elizabeth! Remember, this is my best china, and it doesn't improve a cup to be treated like a cannon ball!" (Cannon ball! Such exaggeration!) "As I was saying, I don't see what in the world she sees in the fellow. I can't see what she sees in him, or he in her."

"But do they, Aunt?"

"Do they, Aunt?" mimicked my aunt in a way that would ruffle the temper of an angel. "Now, what do you mean by that silly speech, Elizabeth?"

Well, I knew what I meant, but I couldn't explain to Aunt Jane. I only said instead: "Aunt Jane, I think the nicest way for you and me to spend our old age is to travel until we die; don't you?"

"Until we die!" almost shrieked Aunt Jane, and her two front curls were bobbing around in the most nervous, senseless fashion. Aunt Jane has a perfect horror of death, which is the one convincing proof to me that Aunt Jane has never been seriously in love. I only know that if when she was a girl, John Chandler—but what is the use of raking up old quarrels? I hope we have had the last. But how I'm ever going to break the news of our final engagement to Aunt Jane without being disinherited is more than I know. She hates men so, and especially John, because John adores me. Yet, if Aunt Jane could but attempt to realize how I hate that odious old Mr. Dilling.

At any rate, Aunt Jane went on to say, "In the first place, how could we travel without a man, Elizabeth?" and she frowned that question at me over the teapot. "Is that all, Aunt? Would you want a man, when you hate and despise them all so?"

My aunt gave a little cough. "Oh, well, not exactly a man, child. There's Mr. Dilling, for instance."

(I knew that was coming.) "But goodness, isn't he a man, Aunt?" I asked in some surprise. It was such fun to have Aunt Jane on the mental rack, if only for a minute. And my aunt said: "Why, yes, certainly, to be sure," and got herself into a nice state of confusion. "But then, you know, he's a widower, Elizabeth, and they're always different. Mr. Dilling is such a nice man; quite one in a thousand, my dear. He—"

"Oh, Aunt Jane!" I laughed rashly. "I do believe you are falling in love!" "Elizabeth Lambertson!" cried my aunt, and poor Dick and I were nearly startled into a fit. I don't dare to imagine what would have happened next if some kind fate hadn't sent Maggy Mara in, somehow in hand. "Well, Priscilla," demanded Aunt Jane so sharply that the girl fairly jumped. There's Aunt Jane again, for you. She won't have Maggy called anything but Priscilla, just because her present fond happens to be the Mayflower. (I rather think Mr. Dilling or somebody belonging to him came over in it.)

"Well, Priscilla," said Aunt Jane again. "A letter, please, m, for Miss Betty, which was left by a messenger boy."

Aunt Jane scrutinized me over her glasses, while I trifled with my cake and held on tightly to the edge of the table.

"Why, how did anyone happen to know you were spending this particular afternoon with me, Elizabeth?"

"I'm sure I don't know, Aunt. I don't think I mentioned it to him—to that—to anyone." It vexed me to see my face flaming up. Aunt Jane can make one feel so like a convict.

"Mentioned it to—to—" she began in high displeasure, and I felt that my hour had come. Aunt Jane glanced quickly at Maggy Mara. "You can go, Priscilla."

"Oh, as you please, m," said the buxom handmaid, sidling up a trifle nearer and getting almost as red and as miserable as me, "as you please, m, would yez be mindin' av I had wan av me gintlemint frim intil the kitchen this evenin'. Cook's going out, an' it do be lonesome."

"Another man to-night, Priscilla!" cried Aunt Jane, turning round to face the culprit squarely, and I couldn't help feeling glad that Maggy seemed almost as reprehensible as I did—to Aunt Jane at least. I almost expected her to fall down on her knees (Maggy, that is), but her stanch Irish blood came to the rescue and made her brave.

"To-night, is it," she repeated a bit impatiently. "Yez do be talkin' as if I kept company ivry night av me loife, ma'am. Shure, an' it was away last Saturday night yez said I cud have Michael Granigan in to sit wid me, ma'am, but the scamp he up an' past the house loike a streak, an' in he went to Delia Maloney, an' yez can't tell me she hadn't her bodice face shut out at the soide gate a-lurin' av him intil her. Well, she can have him, thin, av that's her taste," and Maggy drew herself up breathless, but defiant.

"And pray, who is it you expect this evening, Priscilla," said my aunt unflinchingly.

"Shure, an' it's Jim Doyle, m, as foine a fella as yez'd want to see, an' I met him in the park last Sunday was a fortnight."

"Met him in the park, Priscilla!" screamed Aunt Jane, in italics and capitals, and I am glad to say Maggy didn't even flinch.

"Deed, thin, an' I did, m," she declared. "Me 'n Joolia O'Donnell was standin' on Girard avenue bridge, a lookin' at the boats, an' up he comes, as jaunty as ye please, an' tips his hat that polite and sez, sez he, 'Excuse me, ladies, sez he.'"

"Stop, stop it at once, girl," commanded her mistress. "I will listen to no more. To speak to a man in broad daylight! It is outrageous—positively outrageous!"

"Outrageous," began Maggy, but the enormity of the accusation suddenly overwhelming her, she disappeared behind her apron and emitted a heart-rending sob.

"Oh, never mind, Maggy," I managed to say soothingly. "Aunt Jane didn't mean it." For this overtone I was rewarded with an unexpected glare from Aunt Jane.

"Arrah, Miss Betty, she did an' she did," gasped the afflicted one. "To think av me own mother's daughter called outrageous for speakin' to a decent bye—"

"There, there, go along with you, do. Have the man if you want him," said Aunt Jane sternly, "but don't blame me when it's too late. You'll be sorry when you're in your grave," she added in a sepulchral tone, and then whisked her chair around to me, while poor Maggy went sniffling out. If I could only have gone with her! Oh, to be a candle, or a lamp, or a tramp, or something that somebody could put out. But no, I was doomed.

"And now, Elizabeth," began Aunt Jane, with her most inquisitorial air, "who, if I may ask, who is the young man so favored as to be made aware of your every movement? Another fortune hunter, I suppose." (A penalty of being Aunt Jane's prospective heir is that every man under 99 is a fortune hunter—all except Mr. Dilling of ancient pedigree.)

"A pretty thing," continued my aunt, "to inform a young man of your every movement, as though he cares two straws!"

Now, however did Aunt Jane guess. "I could stand it no longer," "But he does care," I burst out, "and it's not true when you say he doesn't!"

"Hoity, toity," said Aunt Jane aggravatingly, "and has he then assured you of the interesting fact?"

"Oh, Aunt Jane," I went on excitedly, and indeed, I scarcely knew what I was saying. "You've no idea how good he is. He's not like other men. He never tries to squeeze your hand; and he never tries to kiss you; and at the same time he is so devoted, so deferential, so—"

A look of horror had apparently frozen Aunt Jane's countenance. "Elizabeth Lambertson," she gasped, "are you mad or crazy? Squeeze my hand! Try to kiss me, indeed! I should like to see the man!"

"Oh, he wouldn't, Aunt, he wouldn't," I hastened to say in perfect good faith; and then, being utterly wretched, I got out my handkerchief.

Aunt Jane can't bear to see me cry. There was quite a silence, broken only by an effective sound of woe on my part every now and then.

Presently Aunt Jane spoke in a kinder voice. "Who is this letter from, Elizabeth?"

"The letter! Dear me, I had almost forgotten all about it."

"It's from John Chandler, Aunt—I think."

"Think! I presume you know more than you think about it," said Aunt Jane witheringly. "Suppose you open it and see what that young man has to say for himself."

"Well?" she said suddenly. And being startled I stuck a corner of the paper in poor Dick's eye, so that the tears came to him too; and then I got hot and cold. "It's from John Chandler, Aunt, and he's very well!"

"Very well, is he," said my aunt tartly; "that's a blessing, to be sure."

The tears sprang to my eyes again, and I arose with a show of dignity. I could never tell her about our engagement; at least, not yet. "I must be going, Aunt. It's almost 6 o'clock."



For the leisure hour of readers, old and young. All are invited to contribute original puzzles and send solutions to those published. Answers and names of solvers to this issue will appear in two months. An asterisk (*) after a definition signifies that the word is obsolete. Adress letters for this department: "Puzzle Editor," THE AMERICAN FARMER, 129 New York Ave., Washington, D. C.

EMULUMENTS.—NO. 1.

1. A warm, dry, sunny day. 2. A cold, stormy day. 3. A day of rain. 4. A day of snow. 5. A day of hail. 6. A day of fog. 7. A day of wind. 8. A day of thunder. 9. A day of lightning. 10. A day of rain and wind. 11. A day of snow and wind. 12. A day of hail and wind. 13. A day of fog and wind. 14. A day of thunder and wind. 15. A day of lightning and wind. 16. A day of rain and thunder. 17. A day of snow and thunder. 18. A day of hail and thunder. 19. A day of fog and thunder. 20. A day of thunder and lightning. 21. A day of rain and lightning. 22. A day of snow and lightning. 23. A day of hail and lightning. 24. A day of fog and lightning. 25. A day of thunder and rain. 26. A day of lightning and rain. 27. A day of rain and snow. 28. A day of snow and hail. 29. A day of hail and fog. 30. A day of fog and thunder. 31. A day of thunder and rain. 32. A day of rain and snow. 33. A day of snow and hail. 34. A day of hail and fog. 35. A day of fog and thunder. 36. A day of thunder and rain. 37. A day of rain and snow. 38. A day of snow and hail. 39. A day of hail and fog. 40. A day of fog and thunder. 41. A day of thunder and rain. 42. A day of rain and snow. 43. A day of snow and hail. 44. A day of hail and fog. 45. A day of fog and thunder. 46. A day of thunder and rain. 47. A day of rain and snow. 48. A day of snow and hail. 49. A day of hail and fog. 50. A day of fog and thunder. 51. A day of thunder and rain. 52. A day of rain and snow. 53. A day of snow and hail. 54. A day of hail and fog. 55. A day of fog and thunder. 56. A day of thunder and rain. 57. A day of rain and snow. 58. A day of snow and hail. 59. A day of hail and fog. 60. A day of fog and thunder. 61. A day of thunder and rain. 62. A day of rain and snow. 63. A day of snow and hail. 64. A day of hail and fog. 65. A day of fog and thunder. 66. A day of thunder and rain. 67. A day of rain and snow. 68. A day of snow and hail. 69. A day of hail and fog. 70. A day of fog and thunder. 71. A day of thunder and rain. 72. A day of rain and snow. 73. A day of snow and hail. 74. A day of hail and fog. 75. A day of fog and thunder. 76. A day of thunder and rain. 77. A day of rain and snow. 78. A day of snow and hail. 79. A day of hail and fog. 80. A day of fog and thunder. 81. A day of thunder and rain. 82. A day of rain and snow. 83. A day of snow and hail. 84. A day of hail and fog. 85. A day of fog and thunder. 86. A day of thunder and rain. 87. A day of rain and snow. 88. A day of snow and hail. 89. A day of hail and fog. 90. A day of fog and thunder. 91. A day of thunder and rain. 92. A day of rain and snow. 93. A day of snow and hail. 94. A day of hail and fog. 95. A day of fog and thunder. 96. A day of thunder and rain. 97. A day of rain and snow. 98. A day of snow and hail. 99. A day of hail and fog. 100. A day of fog and thunder.

Authors: Guidon, Dan D. Lyon, M. C. S., Tami, Gindens, Jo Mullins, Iron Mack, A. F. Holt, Beech Nut.

ENIGMATICS.

Complete list: Alumnus. Incomplete: Sphinx. Jo Mullins, K. T. Dick, Guidon, H. S. Nut, G. Race, Ellsworth, Pado, Lucile, Aspiro, Ivanhoe, Arty Fishel, Cinders, Holly, Uredge, Joel H. Hint, J. C. M., Timothy, Zaida, Senorita, Adelante, Iron Mack, T. O. Bogger, Jo Umal, Eugene, Christo, Sergeant, A. N. Drey, Cosette, Dan D. Lyon, N. E. Moore, Sacramento Rose.

ENIGMATICS.—NO. 3.

1. A town of Bengal, Worcester see; This good old stand-by stands by me. 2. King of Seville; 1085; To you my Phillips now contrive. 3. The silver of condensation tagged squares, "Upgrading" formists, but who cares? 4. The Frenchman "corral" loves indeed, When "flavored with the anise seed." 5. In Mississippi State a town, Attala County. Put it down. 6. Thou'lt surely solve this square with ease; See thou "neglected" nothing please. 7. Again search Worcester ere you cease; A town of Italy, in Nice. 8. This word, no doubt, will make you think: "An alloy of nickel, copper, and zinc."

—DAN D. LYON, Irwin, Pa.

NO. 20.—DECAPITATION.

Friends, and the days are passing In the pleasures of belief, For the love of truth in our careless youth, Makes a friendship all too brief. Friends, and the hopes are sunshine, And the sunshine semeth true; But the fleeting time with a merry chime Soon turns to a deeper hue.

Lovers, the world is gladsome In the joys so long untold, And the skies above seem to tell of love, In their wealth of flaming gold. Lovers, the heart is leaping To the touch of the first caress, And the first kiss can bestow more bliss Than the soul would dare confess.

But the fates are deaf to pity As the ages come and go, And the changes come o'er a loveless home When the sands of life run low. For deep the world is full of sorrow, When the world is all unknown, Lies one heart asleep, while the shadows creep O'er another left alone!

—CINDERS, Rockford, Ill.

NO. 21.—DIAMOND.

1. A letter. 2. Turf or fuel. (Cont.) 3. A town of Oldenburg. 4. Kinds of long trumpets used among the Persians. 5. Truthful. 6. Varicose enlargements of the spermatic cord. 7. A sub-family of viverridae. (Cont.) 8. Bent abruptly at an angle. 9. Tears. 10. Various familar varieties of pyroxene. 11. Smooth breathings. 12. Heavy. 13. A letter.

—J. C. M., San Francisco, Cal.

NO. 22.—TRANSPPOSITION.

Thou art my life, for when thou art away, All things are changed, the sky is cold and gray; The flowers have lost their fragrance, birds their song; Heaven is a PRIMAL, Right the slave of Wrong, And Winter reigns amidst the FINE of May.

So when thou art absent: "Who is there?" I say: "Love, 'tis I!" "Dear heart, open, pray, For it is thou," for I to thee belong—Thou art my life!

When thou art near life is a Summer's day; When thou art far the sun seems not one ray; Without thee I am feeble with thee strong, Master of fate and brave to face its throng Of hurrying lids, so from me do not stray—Thou art my life!

—HERSPER, Worcester, Mass.

NO. 23.—DIAMOND.

1. A letter. 2. A village of France, in Haute-Garonne. 3. Goats. 4. English painter; 1822. 5. Absurdities. 6. The last junior optime who takes a university degree. 7. Asteriated sapphire. 8. Kinds of overcoats. 9. Lions. 10. A large wooden vessel. 11. A letter.

Nor virtue that enhances Sweet womanhood always; Though now we break no lances Nor meet in death affrays! —GUDON, Washington, D. C.

NO. 25.—RHOMBUS.

Arena: 1. One of a peculiar race inhabiting Arctic America. 2. Excelling. 3. A genus of beautiful trees. 4. Turns. 5. American military officer and author; 1860. 6. A small island in the Indian Sea. (Worc.) 7. A Latin proper name. 8. A pathological condition said to be common in sheep. (Dung.)

(Cont.) 1. A letter. 2. Do you mean what you say? 3. As. 4. The octave. 5. A town of Syria. 6. Lamented. 7. A haven of Arabia on the Red Sea. (Lipp, 1853.) 8. No named. 9. A town in Virginia. (Worc.) 10. Town, Arabian Irak on the Tigris. (Worc.) 11. Sounder. 12. The upper portion of the disjunct tetrad. (Cont.) 13. Hight. 14. A musical syllable. 15. A letter.

—LORE FISHERMAN, Scranton, Pa.

EMULUMENTS.

1. To the person who suggests the most original, novel, and interesting feature for use in this column, a nickel-silver, open-faced watch, high proven good timekeeper. See what your brains can evolve!

2. For the diamond square or half-square containing the most letter 'S' a handsome gold pen and gold-mounted holder.

3. For the best diamond square or half-square, centered or based on the non-decuple of some well-known puzzle, "Dream of the Ages," by Knickerbocker Sherwood, beautifully bound.

4. For the best verse puzzle, to be closely restricted to the theme "Summer," a handsome gold pen and gold-mounted holder.

5. For the best ballad or rondeau, "Dream of the Ages," a handsome gold pen and gold-mounted holder.

6. For the best list of answers to Enigmatica, Nos. 1, 2, and 3, and for nearest list of 15 or more answers to same, a 140-page bound book each.

CONDITIONS.

In awarding prizes 2 and 3, size of form and number of pure Websterian words will be considered; also, accuracy with which definitions are given, and the interest of the puzzles. Puzzles must not exceed 8 lines in length. Only one puzzle can be entered by any contestant for any prize, but one entry for each number will be allowed. All contributions must be marked "Entered for Emulments," and must reach us prior to July 15. Neatness of lists will not be overlooked in the award of No. 6, and word-forms should not be abbreviated. All classes open to subscribers. Do not send six-month subscriptions.

ENIGMATICS.

SPHINX suggests a capital idea, in competition for the novelty prize. He proposes a tournament among "all-around" puzzlers, in solving and contributions, to take place in five or more issues, beginning with that of Sept. 1, each competitor being obliged to enter five flats and five word forms (to be published anonymously) and to solve to all the issues. Judgment is to be passed by a committee without knowledge of the authorship of the several numbers, each contributor and solution to count for a stipulated number of points, no solver being allowed to send supplementary or revised lists. We believe this is an excellent suggestion and already two have agreed to enter the contest. Rules, etc., will be formulated by the committee, which will be announced in our next issue, but in the meantime any ideas you may care to express for the success of this novel contest will be thankfully appreciated by us.

Elsworth's diamond is entered for prize No. 2, and is quite a meritorious production. He is a first-class solver and we are pleased to see him turn his attention to form-making.

Alumnus was the only one to conquer all the knots published in No. 1. Cinders's transposition stood in the way of half a dozen other "completes," and was solved by only three-four of the corps.—Friend Stokes wishes us to state that he has purchased a lottery ticket and that he shall subscribe to every puzzle paper and column in existence if the ticket proves a winner. Let us all hope for Stokes's success.—Guidon's poem in a recent issue of "Mystery" might have struck a more popular chord, had it run something after this fashion:

The sun that breaks out of the sky—the sun! The sun that breaks out of the sky—the sun! That makes the poor puzzler wilt, wither and fade And none so in the cool explanation: Oh, the sun! The sun that breaks out of the sky—the sun!

We believe this number will bear comparison with former ones, but a few eight squares and a half of a dozen are wanted for No. 4.—The attempt of a few persons to make a martyr of the Eastern Puzzlers' League, by allowing the Comendrum Club to carry out its Fourth of July excursion program has put the said persons in a most ludicrous light before the friends of the game.

—R. O. CHESTER.

BIRDS AS BENEFACTORS.

The Mormon Saints Protect the Gulls from Destruction.

The shrewd man who wielded the destinies of his people beside the Salt Lake secured the future usefulness of what they considered the miraculous visitation by fixing a penalty of \$5 upon the head of every gull in the Territory. And now, the birds having found congenial nesting places on solitary islands in the lake, their descendants are so fearless and so tame that they habitually follow the plow like a flock of chickens, rising from almost under the feet of the indifferent horses and setting down at once in the furrow behind, seeking out and eating greedily all worms and grubs and larvae and mice and moles that the plow has disturbed in its passage. The Mormon cultivator has sense enough to appreciate such service, and no man or boy dreams of lifting a finger against his best friend. Extraordinary, indeed, was this sight to eyes accustomed to seeing every bird that attempts to render like service shot and snared, and swept from the face of the earth. Our hearts warmed toward the "Sons of Zion," and our respect for their intelligence increased as we hurried down to the field to see this latter-day wonder.—Atlantic Monthly.

THE MARKETS.

Review of the Fortnight.

Bradstreet's says: "An examination of recent statistics regarding available supplies of wheat in the United States in this and preceding years points to the probability of the United States having at least 140,000,000 bushels of wheat available for export for the year ending July 1, 1891, compared with about 168,000,000 bushels exported in the preceding 13 months, 188,000,000 in 1890-91, and 227,000,000 in 1891-92. Exports of wheat (flour included as wheat), both to the United States and Canada, amount to 2,254,000 bushels this week, against 2,742,000 last week, 3,834,000 in the second week of June last year, 3,000,000 bushels in 1892, and 2,398,000 in 1891."

It is asserted that scarcely any have orders to occupy them beyond July 1, in men's wear, but in the demand for dress goods a somewhat better tone is perceived. Sales of wool in two weeks have been 5,000,000 pounds, against 3,627,186 last year, and 11,520,100 in 1892. The New York and Philadelphia markets are dull, and at Boston a slight decline is seen in prices, with a large sale of Territory wool at cents secured. Western holders appear to be expecting higher prices than can at present be realized in Eastern markets. Further concessions have not enlarged the demand for cotton goods, and the recent report that the production has been close to last year's is said to be based upon news from only the more fortunate mills. That goods are accumulating is evident, but sales have been distinctly improved with the weather.

PRODUCE.

Butter.—The market for butter was not active to-day. Speculators would not pay the price asked for creamery, and the market for other grades was dull. While State butter is quiet, holders feel confident. Eastern creamery butter is rather weak. Choice imitation creamery is held with confidence. Fresh butter is quiet and was better urged for sale. We quote:

State dairy, new, half-firkin tubs, choice. 16 1/2
State dairy, new, half-firkin tubs, fair to good. 16 1/4
Eastern creamery, new, fancy, per pound. 16 1/2
Pennsylvania creamery, new, fancy, per pound. 16 1/2
Eggs, evaporated, per pound. 16 1/2
Eggs, white, per pound. 16 1/2
Eggs, brown, per pound. 16 1/2
Eggs, black, per pound. 16 1/2
Eggs, yellow, per pound. 16 1/2
Eggs, green, per pound. 16 1/2
Eggs, red, per pound. 16 1/2
Eggs, blue, per pound. 16 1/2
Eggs, purple, per pound. 16 1/2
Eggs, pink, per pound. 16 1/2
Eggs, grey, per pound. 16 1/2
Eggs, black, per pound. 16 1/2
Eggs, yellow, per pound. 16 1/2
Eggs, green, per pound. 16 1/2
Eggs, red, per pound. 16 1/2
Eggs, blue, per pound. 16 1/2
Eggs, purple, per pound. 16 1/2
Eggs, pink, per pound. 16 1/2
Eggs, grey, per pound. 16 1/2
Eggs, black, per pound. 16 1/2
Eggs, yellow, per pound. 16 1/2
Eggs, green, per pound. 16 1/2
Eggs, red, per pound

